TURKISH UNIVERSITY LEVEL EFL LEARNERS' COLLOCATIONAL KNOWLEDGE AT RECEPTIVE AND PRODUCTIVE LEVELS

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ABSTRACT

TURKISH UNIVERSITY LEVEL EFL LEARNERS' COLLOCATIONAL KNOWLEDGE AT RECEPTIVE AND PRODUCTIVE LEVELS

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Collocations are an important part of vocabulary knowledge, and it is a subject that has recently attracted attention, while still in need of more research. The aim of this study is to answer three research questions related to the collocational knowledge of Turkish university level EFL learners at different proficiency levels of English. The first research question aims to compare the pre-intermediate (PIN) and the advanced (ADV) level learners' collocational knowledge at receptive and productive levels. The second one is to analyze the performance of the PIN and the ADV students in two main collocation categories; lexical and grammatical. Lastly, the performance of both groups are focused on to find the collocation type (among verb-noun, adjective-noun, adjective-preposition, noun-preposition collocation types) they show the best performance in. Two offline tests were used to answer these questions. The results show that there is a significant difference between the PIN and the ADV groups at both receptive and productive levels. It can be concluded that proficiency is an

important criterion in collocational knowledge, and learners do not necessarily know the collocates of the vocabulary items that they know. Although there is no significant difference between the PIN group's performance in lexical and grammatical collocations, the ADV group showed a better performance in lexical collocations. Lastly, the PIN group at receptive and the ADV group at both receptive and productive levels showed the best performance in verb-noun collocations, which is in line with the previous research focusing on different collocation types.

Keywords: collocations, receptive knowledge, productive knowledge, testing, language proficiency

İNGİLİZCE'Yİ 2. DİL OLARAK ÖĞRENEN TÜRK ÜNİVERSİTE DÜZEYİ ÖĞRENCİLERİNİN ALGILAMA VE ÜRETME SEVİYESİNDEKİ EŞDİZİM BİLGİSİ

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Eşdizimler kelime bilgisinin önemli bir parçasıdır ve halen araşırmaya açık olan son zamanlarda çokça ilgi çekmiş bir konudur. Bu çalışmanın amacı, farklı seviyelerde İngilizce öğrenen Türk üniversite öğrencilerinin eşdizimlilik bilgileri ile ilgili üç soruya cevap bulmaktır. İlk soru orta altı seviye ve ileri seviye öğrencilerin anlama ve üretme seviyelerinde eşdizimlilik bilgilerini karşılaştırmaktır. İkinci araştırma sorusu orta altı seviye ve ileri seviye öğrencilerin kendi grupları içindeki dilbilgisel ve anlamsal eşdizimlilik bilgilerini incelemektir. Son olarak her iki grubunda hangi eşdizim türünde (fiil-isim, sıfat-isim, sıfat-edat, isim-edat eşdizim türleri arasından) en iyi performansı gösterdiklerine odaklanılmıştır. Bu sorular araştırmacının oluşturduğu iki testin uygulanmasıyla araştırılmıştır. Sonuçlar iki grup arasında hem anlama hem de üretme seviyesinde anlamlı bir fark olduğunu ortaya koymuştur. Orta altı grupta olmamasına karşın, ileri seviye grupta anlama ve üretme seviyesindeki eşdizim bilgileri arasında bir korelasyon bulunmuştur. Yeterlilik seviyesinin eşdizim

bilgisinde önemli bir kriter olduğu ortaya çıkmıştır ve öğrencilerin bildikleri her kelimenin eşdiziminlerini bilmedikleri görülmüştür. Orta altı seviyenin dilbilgisel ve anlamsal eşdizim bilgileri arasında istatistiksel olarak anlamlı bir fark olmasa da, ileri seviyedeki grubun anlamsal eşdizimlerde daha iyi performans gösterdiği görülmüştür. Son olarak ise orta altı grupta anlama seviyesinde ve ileri grupta hem anlama hem de üretme seviyelerinde fiil-isim eşdizim türünde en iyi performansa sahip olunduğu görülmüştür ki bu da geçmiş çalışmaların bulguları ile örtüşmektedir.

Anahtar kelimeler: eşdizimler, dilbilgisel eşdizimler, anlamsal eşdizimler, ölçme, dil yeterliliği

To my dear family, Ergun & Selma & Elif BAĞCI

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CHAPTER 1

INTRODUCTION

1.1. Introduction

None of the parties involved in the process of learning a language (students, teachers, materials writers, and researchers) can deny the fact that learning vocabulary is an important component of mastering a second language (Schmitt, 2010).

Large vocabularies, and speed and depth of vocabulary knowledge seem crucial to the development of good performance in all language skills (Milton, 2013). It is generally assumed that the vocabulary size of a person is related to his language ability (Alderson, 2005). The table below (Table 1) is compiled by Schmitt (2010) including the results of the DIALANG test prepared and given by Alderson and his research team (2005). It shows the correlations between vocabulary and other language proficiencies. It can be seen that there is a strong relationship between vocabulary knowledge and reading, listening, writing skills and grammar. The r² values (i.e. correlation values squared) show that vocabulary knowledge itself is the reason for 37- 62 % of the variance in the different language proficiency scores. Even the lowest correlation (the correlation between the vocabulary checklist test and understanding specific details in listening (.44)) still accounts for a 19 % of variance, which is still estimable (Schmitt, 2010). Schmitt (2010) states that when we consider the numerous factors that can affect these proficiency scores such as learner motivation and background knowledge, it is noteworthy that one single

factor, vocabulary knowledge, explains this large percentage of variation that can be seen from the table clearly.

Table 1 The relationship between vocabulary and other language skills and grammar (Schmitt, 2010, p. 5).

	Vocabulary Checklist	Vocabulary test battery				
	Test	Meaning	Collocation	Gap-fill	Word formation	Total
Reading	0.64					
-Identifying main idea	0.5					
-Understanding specific detail	0.47					
-Lexical inferencing	0.58					
Listening	0.61	0.44	0.43	0.56	0.5	0.65
-Identifying main idea	0.6					
-Understanding specific detail	0.44					
-Lexical inferencing	0.56					
Writing	0.7	0.62	0.63	0.66	0.71	0.79
-Accuracy	0.7					
-Register	0.57					
-Textual organization	0.51					
Grammar	0.64					

Schmitt (2010) argues that vocabulary teaching generally refers to the teaching of individual words; however, it has become apparent that formulaic language is an essential part of language learning and use as it has been emphasized by many researchers (e.g. Fellbaum, 2007; Nattinger and DeCarrico, 1992; Wray 2002). In addition to idioms, proverbs, and many other elements that constitute formulaic language, collocations are also considered as a part of it.

Since languages include many strong collocational pairs, the topic of collocation is worth studying in vocabulary studies (McCarthy, 1990). Since 1957, when Firth stated "You shall know a word by the company it keeps" (p. 179) words have not been classified according to their meanings only. They have also been categorized according to their co-occurrence with other words (Nattinger and DeCarrico, 1992). However, there is still no exact definition of what a collocation is (Fontenelle, 1994). Different researchers define it in different ways, which will be explained in detail in the following chapter. In a broad sense, collocations are the "sequences of lexical items, which habitually co-occur, but which are nonetheless fully transparent in the sense that each lexical constituent is also a semantic constituent" (Cruse, 1986, p. 40). There are two main collocation categories: lexical collocations and grammatical collocations. Lexical collocations are collocations which have only content words as their components. Grammatical collocations, on the other hand, are collocations which have a function word as a component along with a content word (Benson et al., 2010).

Knowing which words collocate is part of native speakers' communicative competence (Partington, 1998) and as it is now agreed by many researchers (e.g. Li and Schmitt, 2009; Sinclair, 1991; Wray, 2002), the native-like use of collocations is an important element of proficient language use. Although it is true that the knowledge of collocational appropriacy is part of a native speaker's competence, it can be problematic for learners when collocability is language-specific and is not only determined by universal semantic constraints. For example, *green blood* would sound strange in any culture; however, cultural knowledge is not always enough to predict which words collocate with which words. In such cases, even very advanced learners also often produce inappropriate or unacceptable collocations (McCarthy, 1990). Therefore, recently researchers have started to focus on the use of collocations by L2 learners and their collocational knowledge (Alsakran, 2011; Gitsaki, 1996; Lewis, 1993; Li& Schmitt, 2009; Shehata, 2008 among others).

According to Hirsh (2012), apart from the measurement of second language vocabulary knowledge, another important element in second language vocabulary research is: "the nature of word knowledge, with lines of enquiry investigating the dimension of receptive to productive knowledge (see Laufer, 1998; Lee/ Muncie, 2006) and the dimension of partial to precise knowledge" (p. 14).

Nation (2001) introduced 'receptive' and 'productive' knowledge when he described in detail what it means to know a word. He presented a full picture including all aspects of word knowledge after his more general classification of word knowledge in 1990. According to Nation (2001), there are three main categories of word knowledge which are form, meaning and use, and knowing collocations falls under the 'use' category. As it can be seen, receptive and productive word knowledge is an important element in second language vocabulary research, and the number of studies on this issue has been increasing (e.g. Fan, 2000; Laufer, 1998; Webb, 2005).

1.2. Background of the study

As an EFL teacher myself, I realized the importance of vocabulary teaching when I observed that one of the main reasons why students fail in exercises related to different skills; i.e. writing, reading, listening and speaking, is their lack of vocabulary. Especially in speaking and writing, which are productive skills, students at different proficiency levels make collocational mistakes quite often. I also saw that not only EFL learners but also EFL teachers sometimes make collocational mistakes. Observations as such led me to focus on the topic of collocations.

Owing to the fact that the importance of collocations has been realized by a number of researchers recently, many studies have been conducted on L2 learners' knowledge of collocations (Alsakran, 2011; Gitsaki, 1996; Shehata, 2008; Sonbul

and Schmitt, 2013; Yamashita and Jiang, 2010). As Benson et al. (2010) also state, so as to be native-like in a language, a language learner should learn how words collocate with one another. However, to the best of my knowledge, no studies have been conducted so far on the collocational knowledge of Turkish learners of English.

In addition, the studies on the collocational knowledge in the field have been done with advanced level learners only (e.g. Alsakran, 2011; Li and Schmitt, 2009; Shehata, 2008; Sonbul and Schmitt, 2013; Yamashita and Jiang, 2010). Few studies on this issue have used a variety of levels other than advanced levels (Bonk, 2000; Gitsaki, 1996).

To date, the studies that aimed at measuring the receptive and productive knowledge of L2 learners have generally used and adapted the test prepared by Bonk (2000) or Shehata (2008). In addition, Gyllstad (2007) designed tests that can be used to assess receptive collocational knowledge of advanced L2 learners of English. However, not many new tests which are valid and reliable have been prepared to see the performance of L2 learners at different levels in collocations at receptive and productive level. The present study will contribute to the field with two tests testing collocational knowledge of EFL learners; one acceptability judgment test for receptive level and one gap filling test for productive level.

1.3. Purpose of the study

This study aims at revealing a representative picture of the collocational knowledge of Turkish learners of English at Pre-Intermediate (PIN) and Advanced (ADV) levels at university. By comparing these two levels, it will be studied whether there are significant differences between them in terms of their knowledge of collocations of frequent words.

Apart from this comparison, the performance of both groups will be studied separately in order to see the performance of each group in lexical and grammatical collocations at receptive and productive levels. In addition, it will be determined which collocation type each group knows the best among the 4 collocation types (verb-noun, adjective-noun, adjective-preposition, noun-preposition) to be tested.

1.4. Significance of the study

The significance of the present study lies in a number of areas. First of all, to the best of my knowledge, as it has already been stated, no study has been conducted so far in order to check the collocational knowledge of the Turkish learners of English. Therefore, the present study will be the first one related to this issue. The results of the study can present implications for the EFL teachers. It can raise awareness among teachers to focus on collocations more while teaching new vocabulary items. In addition, the study will reveal the performances of the participants in lexical and grammatical collocations, so according to the results, teachers may use different approaches while teaching them.

Furthermore, the tests adapted and prepared by the researcher can be administered to learners at different levels so as to evaluate their collocational knowledge.

The ultimate goal of this study is to raise awareness about the importance of collocations in vocabulary teaching and to offer a comprehensive analysis of the collocational knowledge of Turkish learners of English at university level.

1.5. Research questions

In order to address the goals that have been mentioned so far, the following research questions are asked in this study:

- 1) Is there a significant difference between the PIN and the ADV students in terms of their:
 - a) receptive knowledge of collocations?
 - b) productive knowledge of collocations?
- c) the correlation between their receptive and productive collocational knowledge?
- d) performance in lexical and grammatical collocation types in the acceptability judgment and the gap filling tests?
- e) performance in each of the four tested collocation types (verbnoun, adjective-noun, adjective-preposition, noun-preposition)?
- 2) At receptive and productive levels, do the PIN and ADV students know lexical or grammatical collocations better?
- 3) Out of the four tested collocation types, which one do the PIN and the ADV students know the best?

1.6. Definitions of terms

The definitions of commonly used terms throughout the thesis are provided below so as to clarify in what respect they are used in this study.

EFL: It is teaching and learning of English as a foreign language in a region where English is not spoken as a native language. In EFL, the main source of exposure for the English language is the classroom and personal effort is required for any other exposure to the language (Nayer, 1997).

Collocation: "Connections between items in the mental lexicon based on lexical and semantic characteristics" (Bonk, 2000, p. 7)

Formulaic language: "A sequence, continuous or discontinuous, of words or other meaning elements, which is, or appears to be prefabricated: that is, stored and retrieved whole from memory at the time of use, rather than being subject to generation or analysis by the language grammar" (Wray and Perkins, 2000, p. 1)

Receptive Knowledge: "Being able to understand a word in its spoken or written form" (Pignot-Shahov, 2012, p. 43)

Productive Knowledge: "To be able to use a word correctly in a written work or a speech" (Pignot-Shahov, 2012, p. 43)

1.7. Outline of the study

The present study includes six main chapters. Chapter 2 will present the review of literature that is relevant to the present study with a snapshot of studies that are related to it. Chapter 3 is the methodology chapter where information on the method of the study will be given. Chapter 4 will provide the statistical results of the present study will be shared. In Chapter 5, the results will be discussed in detail. The last chapter, Chapter 6 will draw some conclusions.

CHAPTER 2

REVIEW OF LITERATURE

2.1. Overview of the chapter

This chapter focuses on three main points in the related literature. Firstly, what it means to know a word will be explained. Then, different approaches to the definition of collocation will be presented. Finally, the importance of collocations in the ELT context and the concept of testing collocations will be explicated.

2.2. To Know a word

When many people are asked what the most apparent characteristic of a language is, they will say 'words' (Halliday and Yallop, 2007). Words can be defined as the freestanding elements which have meaning (McCarthy, 1990). Jackson and Ze Amvela (2007) gives the definition of the word in English with four characteristics: (1) The word as a unit is not interruptible. (2) It may be composed of one or more morphemes. (3) It is generally seen in the structure of phrases. (4) It must belong to a specific word class or part of speech.

Since words cannot be considered isolated units of language, but fit into a number of interlocking systems and levels, about every word, there are many things to know. Furthermore, there is not only one degree of knowing a word (Nation, 2001).

Cronbach (1942, as cited in Read & John, 1986) classified the concept of knowing a word into five categories. These categories are:

a) generalization the ability to define the word

b) application choosing the proper use of the word

c) breadth of meaning remembering different meanings of the

word

d) precision of meaning using the word correctly in all different

situations

e) availability the ability to use the word

Richards (1976) added many aspects to knowing a word such as the likelihood of other words that may be associated with the word, its relative frequency (with the exception of concrete words), the derivations of the word etc. Recently, Nation (2001) referred to the elements that are involved in knowing a word as its form, meaning and use. While explaining these three elements, he included the subcategories under them, some of which are at receptive and some of which are at productive level (See Table 2).

Table 2 What is involved in knowing a word (Nation, 2001, p. 27)

	spoken	R	What does the word sound like?	
	spoken	P	How is the word pronounced?	
	written	R	What does the word look like?	
Form	written	P	How is the word written and spelled?	
		R	What parts are recognizable in this word?	
	word parts		What word parts are needed to express the	
		P	meaning?	
		R	What meaning does this word form signal?	
	form and meaning		What word form can be used to express this	
		P	meaning?	
Meaning	concept and R What is included in the concept?		What is included in the concept?	
Wicaming	referents P		What items can the concept refer to?	
]		What other words does this make us think of?	
	associations		What other words could we use instead of this	
		P	one?	
	grammatical	R	In what patterns does the word occur?	
	functions	P	In what patterns must we use this word?	
			What words or types of words occur with this	
	collocations	R	one?	
Use	conocations		What words or types of words must we use with	
030		P	this one?	
	constraints on use		Where, when, and how often would we expect to	
	(register, frequency	R	meet this word?	
)		Where, when, and how often can we use this	
	,	P	word?	
Note: In column 3, R = receptive knowledge, P = productive knowledge				

Receptive (sometimes referred to as passive) vocabulary use includes apprehending a word while listening and reading and retrieving the meaning of it. Productive (sometimes referred to as active) vocabulary use, on the other hand, involves wanting to express a meaning by speaking or writing and retrieving and producing the appropriate spoken or written word form (Nation, 2001). Teichroew (1982) states that the distinction between these two types of knowledge cannot be clear-cut; therefore, they should be regarded on a continuum. Melka (1997) also suggests to put 'receptive' and 'productive' vocabulary knowledge on a continuum. If a learner learns about a word, there will be a more gradual shift on the continuum. Nation (2001) argues that if these knowledge types are seen as scales, there should be one scale for oral use of language (listening and speaking) and one for written use (reading and writing).

After analysing the results of three different studies done on receptive and productive vocabulary size of non-native speakers (Laufer, 1998; Laufer and Paribakht, 1998; Waring, 1997), Nation (2001, p.371) reaches the following conclusions related to receptive and productive vocabulary:

- The receptive vocabulary of learners is larger than their productive vocabulary size.
- The receptive vocabulary-productive vocabulary ratio is not fixed.
- A bigger gap is formed between receptive and productive vocabulary at the lower-frequency levels as learners learn new vocabulary items.
- Learners know a large proportion of high-frequency vocabulary at both receptive and productive levels.

Many other research findings also show that the size of receptive vocabulary of L2 learners is larger than the size of their productive vocabulary (Laufer and Goldstein, 2004; Miller, 1999; Webb, 2008).

2.3. Approaches to collocation

Since Firth (1957), known as the father of the collocations, introduced the term collocation, different researchers have defined it in a variety of ways. A very general definition of collocation is the tendency of a lexical item to co-occur with one or more words (Cruse, 1986; Crystal, 1985; Halliday, 1966). However, as Lewis (1997) states, another important point to keep in mind is the fact that although collocations co-occur, not all words that co-occur can be considered collocations.

Three main approaches to the study of the phenomenon collocation are worth mentioning while defining it (Gitsaki, 1996). These approaches can be called the lexical composition approach, the semantic approach and the structural approach. In what follows, these approaches will be discussed in more detail.

2.3.1 The lexical composition approach

The first approach, the lexical composition approach, is developed by Firth (1957). According to this approach, the meanings of the words are formed with the words they co-occur and collocations are considered as "a mode of meaning" (Firth, 1957, p. 192). Firth (1957) notes that the lexical meaning of a word should be explained at different levels which are orthographic level, phonological level, grammatical level and collocational level. He explains these levels with the word 'peer'. At orthographic level, the meaning of it is different from the word 'pier'. At phonological level, its pronunciation is included. It can either be used as a verb or a noun at grammatical level. At collocational level, different meanings of 'peer' can be obtained as in the example of *school peers*.

Barnbrook et al. (2013) emphasize the importance of the lexical composition approach because thanks to this approach it is possible to consider collocations as significant elements of the causes of language patterns, not just as observable effects of language use.

The novel step by Firth in this area is the fact that he looks at the relations between lexical items at a syntagmatic level rather than at a paradigmatic level (Gitsaki, 1996). These two concepts can be explained with the help of an example. In a sentence such as *John drove the bus*, *bus* is in a paradigmatic relationship with other lexical items such as *car*, *truck* and in a syntagmatic relationship with the other lexical items in the example sentence, which are *John* and *drove*. Firth (1957) draws attention to the lexical items that are in a syntagmatic relationship with each other while explaining collocations.

Firth's description of collocation was later developed by Halliday (1966) and McIntosh (1961, 1967), known as Neo-Firthians, but most markedly by Sinclair (1966, 1998). Sinclair (1966) separates grammar from lexis. He contributes to the discussion of the definition of collocations with three new terms which are node, span and collocates. Node is the lexical item that is under analysis. Span refers to the other lexical units that come before or after the node. Lastly, collocates are the items that are within the span.

McIntosh (1961) notes that collocations are independent of grammatical issues and they are as important as grammatical patterns. Similarly, Halliday (1966) proposes that the collocational relationships between words can be defined without any reference to grammatical restrictions. He introduces the concept 'set', which means "the grouping members with like privilege of occurrence in collocation" (p. 153). For example, he says *bright*, *hot*, *shine*, *light*, *come out* all belong to the same lexical set due to the fact that they collocate with the same word: *sun* (p. 158). All in all, although linguists that favor this approach still emphasize the importance of

grammar to describe collocations, they look at the lexical items at a syntagmatic level to best define them.

2.3.2 The semantic approach

Similar to the lexical composition approach, the semantic approach studies collocations on a semantic basis, which is separate from grammar (Gitsaki, 1996). The insufficiency that some researchers like Lyons (1966) found in the lexical composition approach was that it cannot answer the question why lexical items collocate with certain lexical items but not with the others.

Although he did not specifically study collocations, Chomsky (1965) can be regarded as one of the first researchers to introduce semantics in the study of collocations. He differentiated two essential subcategorization rules from the present context-sensitive subcategorization rules which make a specific lexical item sensitive to the subcategorization characteristics of the lexical item. The first one is 'strict subcategorization rules', which subcategorize a lexical category according to the frame of category symbols that it appears in. The second one is 'selectional rules' which subcategorize a lexical category according to syntactic features in specified positions of the sentence. For example, the verb 'frighten' requires an animate object. This is explained by the selectional rule [— Det [+Animate]], or [[+Animate]- Object]. The same verb 'frighten' is transitive, so it must be followed by an NP (noun phrase). This is expressed by strict subcategorization rule (Graffi, 2001).

Katz and Fodor (1963), for example, come up with a semantic theory which would organize, systematize and generalize facts related to meaning. This theory suggests that each lexical item in a dictionary should include a selection restriction. Taking the lexical item *sleep* as an example, it should be explained that it requires a subject

with the 'animate' feature. Another semanticist, Cruse (1986) explains the collocational restrictions as arbitrary. To illustrate, *blond* refers to hair; however, it can only be used with human hair. It is not possible to use it to describe a hairy animal. Since there are many examples as this one which are only explained as arbitrarily restricted, it can be considered as a weakness of this approach (Gitsaki, 1996). As Gitsaki (1996) concludes, semanticists did not say anything new regarding collocations apart from criticizing the lexical composition approach and arguing that syntagmatic lexical relations should be studied within the field of semantics.

2.3.3 The structural approach

Different from the previous two theories, the structural approach gives importance to grammar while explaining collocations. Mitchell (1971), as one of the important researchers following this approach, states: "Collocations are to be studied within grammatical matrices [which] in turn depend for their recognition on the observation of collocational similarities." (p. 65)

Mitchell (1971) suggests the concept 'root' to collocation studies. He says that collocations are comprised of roots rather than words and they need to be studied within the grammatical matrix. In the collocation *heavy drinker*, for instance, *heavy* and *drink* are regarded as roots rather than words by Mitchell and these two roots can be combined to come up with different collocations such as *drink heavily* (Gitsaki, 1996). On the other hand, this view of collocations cannot be adapted to all collocations, so it was criticized by some other researchers (Gitsaki, 1996; Greenbaum, 1974).

Greenbaum (1974) is another researcher that gives importance to grammar while studying collocations. He points out the fact that collocations require a certain syntactic relationship to occur. For example, the sentence *His sincerity frightens us* is

acceptable, whereas *We frighten his sincerity* is not, which shows the limit that syntax imposes (Greenbaum, 1974). *Sincerity* collocates with *frighten* but only in certain syntactically acceptable situations.

Overall, the studies following the syntactic trend show that not only lexical but also grammatical words should be included while explaining collocational restrictions (Gitsaki, 1996). Therefore, Gitsaki (1996) proposes:

(...) there is no need for the debate among linguists over whether collocations should be described using lexical analysis, or semantic rules and/ or grammar rules. It is possible that by defining structurally and isolating a particular collocational pattern and examining its frequency, variability and systematicity in a language corpus, the notion of collocation could be enriched. (p. 158)

In 1986, Benson, Benson and Ilson compiled *the BBI Combinatory Dictionary of English*, in which they divided the collocations into two main categories. The first category is lexical collocations, which include content words. Content words, also called lexical words, (nouns, verbs, adjectives and adverbs) have the meaning which can be looked up in a dictionary (Field, 2003). There are seven types of lexical collocations in the BBI. The other main category is grammatical collocations, which include a preposition or a grammatical structure, e.g. an infinitive, with a content word as the dominant element. There are eight main types of grammatical collocations; however, the last grammatical collocation type includes nineteen English verb patterns. Therefore, overall the BBI has 33 collocational patterns.

2.3.4 Recent views on the approaches to collocation

According to the available recent literature, there are three main categories defining collocations. The first one is frequency-based approach. It looks at collocations as constituents co-occurring so frequently that their meanings cannot be predicted

(Halliday, 1966). The second approach is the phraseological approach, the most famous advocates of which are Cowie (1998) and Howarth (1998). This approach supports the view that the lexical items that a collocation is comprised of must be syntactically related and transparent in meaning (Nizonkiza et al., 2013). Unlike the frequency-based approach which gives more importance to the frequency of cooccurrence, the phraseological approach gives more importance to the degree of substitutability and transparency of meaning (Barfield and Gyllstad, 2009; Nesselhauf, 2005). The third approach to the concept of collocations is the combination of the first two approaches. This approach is referred to as the 'best of the two worlds' by Gyllstad (2007). It tries to eliminate the restrictive sides of the first two approaches. It includes researchers from the other two approaches, but these researchers differ from the others in some respects (Nesselhauf, 2003, 2005; Stubbs, 1995). For example, Nesselhauf (2003, 2005) works in the phraseological tradition; however, she uses frequency as a complementary method while analyzing learner corpora. Therefore, it is not quite possible to fit her into either the frequency-based or the phraseological approach.

2.3.5 Collocations, idioms and free word combinations

Because the boundary between idioms, collocations, and free combinations is not clear-cut (Taeko, 2005), it is worth mentioning how linguists differentiate these three concepts from one another. To distinguish between idioms, collocations and free combinations, Nattinger and DeCarrico (1992) mention three criteria which are flexibility, compositionality, and productivity. They consider the definition of collocations by Wood (1981) as the best model to define word combinations. Wood (1981) regards word combinations as a continuum. Apart from a semantic criterion looking at whether the meaning of a collocation can be predictable from the meanings of each word in it (compositionality), she also takes into account a syntactic criterion. This criterion looks at whether the form of a composition is fully

productive or not. Then, there are also collocations that are somewhere in between these two poles.

Regarding these criteria, an idiom is described as a fully non-compositional, non-productive collocation. For instance, by and large is an idiom because it does not make any compositional sense and it does not have a syntactic pattern generating other similar structures. Collocations, on the other hand, offer a compositionality interpretation to a certain degree, but the elements that it includes confuse it. Take umbrage is an example to this group. The verb take baffles the meaning of umbrage there. Substitution is possible in most of the collocations and they produce 'idiom families' (pay heed/ attention) where it is possible. When substitution is limited by syntactic categories and semantic features, there appears another class called 'colligation', which was first used by Firth (1957). Colligations can be referred to as generalizable collocation classes. Hoey (2005) explains the idea behind colligations as:

The basic idea of colligation is that just as a lexical item may be primed to co-occur with another lexical item, so also it may be primed to occur in or with a particular grammatical function. Alternatively, it may be primed to avoid appearance in or co-occurrence with a particular grammatical function. (p. 43)

Stubbs (2002) also highlights the importance of the concept 'colligation' as he states that the essential relations between lexis and syntax need to be explained, and colligation is the right explanation for that. After idioms, collocations and colligations, at the other end of the continuum, there is the last item called 'free combinations', which have fully compositional and productive phrases such as *see the river*. This phrase is a combined meaning of individual elements, and the form of it is a base for an unlimited number of other phrases. The figure below shows how this continuum that differentiates idioms, collocations, colligations and free combinations would look like:

Figure 1 The continuum of word combinations by Nattinger and DeCarrico (1992, p.178)

All in all, Nation (2001) has gathered 10 main criteria to classify items as collocations in the light of studies conducted by different researchers. These ten criteria have been ordered from most lexicalized to least lexicalized by Nation (2001, p. 328) and he points out to the fact that most collocations have only some of these criteria.

- a) Frequency of co-occurrence: The scale in this criterion ranges from 'frequently occurring together' to 'infrequently occurring together'. This criterion is especially very important to the designers of teaching materials.
- b) Adjacency: Some collocations are next to each other as in *close friend*, but some of them are separated by some other words as in *little did X realize*. In a scale, 'next to each other' would be at the one end and 'separated by several items' at the other.
- c) Grammatically connected: Collocations generally appear in the same sentence. However, there are some examples of collocations that are not in the same sentence, but in the same text. They are not grammatically connected to each other, but as collocates they are in a lexical cohesion relationship. In a scale, 'grammatically connected' would be at the one end and 'grammatically unconnected' at the other.
- d) **Grammatically structured:** Kjellmer (1982:25, cited in Nation, 2001) states that 'frequently co-occurring' is not enough as a criterion since many other words such as 'although he' or 'of the' also occurs quite a lot

- but they are not considered as collocations. Therefore, Kjellmer constructed 'grammatically structured' criterion with a list of allowed structures. In a scale, 'well structured' would be at the one end and 'loosely related' at the other.
- e) **Grammatical uniqueness:** While some collocations are grammatically unique (e.g. *hell-bent for leather*), some others follow regular patterns (e.g. *washy coffee*). There are also collocations which are exceptions to rules as in *go to bed* (since there is no article before *bed*). In a scale, 'grammatically unique' would be at the one end and 'grammatically regular' at the other.
- f) Grammatical fossilization: If a collocation is grammatically fossilized, it does not allow any change to its form (e.g. by the way). Some collocations do not allow any change in its word order but allow small changes: kick the bucket cannot be The bucket was kicked, but He kicked the bucket is acceptable. Some others allow changes in the word order. For instance, to piece things together can be used as things were pieced together or they were piecing things together. In a scale, 'no grammatical variation' would be at the one end and 'changes in part of speech' at the other. 'Inflectional change' would be the mid-point.
- g) Collocational specialization: Some words only occur in collocations. The words in them are not used in any other places (e.g. hocus pocus). There are some other collocations, in which only one word is special to them (e.g. kith in kith and kin). Some collocations include words that can be seen in other collocations, too (e.g. good answer). In a scale, 'always mutually co-occurring' would be at the one end and 'all occurring in a range of collocations' at the other. 'One bound item' would be in the middle in this scale.
- h) Lexical fossilization: Some collocations do not allow the replacement of words in them (e.g. by and large). In some collocations, substitution is allowed with the words of related meaning (e.g. entertain a belief,

entertain a desire). In a scale, 'unchangeable' would be at the one end and 'allowing substitution in all parts' at the other. 'Allowing substitution in one part' would be in the middle of this scale.

- *i)* **Semantic opaqueness:** Mostly in idiomatic collocations, the meaning of the collocation cannot be inferred from the meaning of the words that constitute it (e.g. *for good*). In a scale, 'semantically opaque' would be at the one end and 'semantically transparent' at the other.
- *j)* **Uniqueness of meaning:** Some collocations only have one meaning (e.g. *keep a secret, full moon*) while some collocations may have two meanings. For example, *kick the bucket* has two meanings. It means both to die and to kick a bucket with your foot.

With these ten scales, Nation (2001) describes the features of collocations in a comprehensive way. However, the distinction between idiomatic expressions and collocations are not explicitly covered.

According to the study carried out by Howarth (1996), restricted collocations are far more common than idioms in native speaker academic writing. Bonk (2000) gives an example to explicate Howarth's definition of restricted collocations. The phrase to catch a cold can be considered as a restricted collocation because of three main reasons. First, it can be recognized as a conventional phrase. It makes use of one element in a specialized way (the verb catch is different from its prototypical meaning here). This phrase has a limited number of collocates (for this phrase, illnesses can be mentioned). Lastly, this phrase is semantically transparent. To catch a butterfly and I didn't catch that are not restricted collocations here since the former is a free combination and the latter is an idiomatic usage.

Furthermore, Howarth (1998) conducted a corpus study comparing the use of verbnoun collocations by native speakers of English and non-native English speakers who are MA students. He found that compared to the native group, the non-native group used about 50 % fewer restricted collocations. Based on the results of Howarth's analysis (1998), Li and Schmitt (2009) conclude that among the three collocational groups (i.e. idioms, restricted collocations and free combinations), the restricted collocations group seems to be the most problematic for advanced level learners.

Taking into account the different approaches to the collocation, the present study adapts the operational definition of collocations by including the following points:

- 1) "Collocations are those combinations of words which occur naturally with greater than random frequency. Collocations co-occur, but not all words which co-occur are collocations." (Lewis, 1997, p. 44)
- 2) Collocations are a combination of two or more words that fall in the middle between idioms and free word combinations allowing a limited degree of substitution of their lexical components (Bentivogli & Pianta, 2003).
- 3) Collocations are less lexically fixed and allow substitution in at least one of their constituent components (Gitsaki, 1996).
- 4) Collocations are semantically transparent. Therefore, unlike idioms (e.g. tie the knot), their meanings can be understood based on the literal meanings of the words that they include (e.g. make a mistake) (Gitsaki, 1996).

This study adopts the classification of collocations done by Benson et al. (2010) (See Appendix N for the full list of collocation types), who divide collocations into two main categories; lexical and grammatical. Lexical collocations have 7 sub categories and grammatical collocations have 8 sub categories. The last grammatical collocation category has 19 sub categories as well. Overall, there are 33 collocation types in Benson et al. (2010). There are some criticisms against this classification as not being "an entirely valid one" (Bonk, 2000, p. 7). Despite criticisms, this classification is still among the most used and adapted classification by many

researchers (Chen, 2008; Gitsaki, 1996) since there is still not one accepted definition of collocation (Fontenelle, 1994) or a classification of it.

2.4. Collocational knowledge of L2 learners

Pawley and Syder (1983) argue that the idiomatic control and fluency in a language depend on a body of 'sentence stems' that are 'lexicalized or 'institutionalized'. These stems are a unit of clause which has a wholly or largely fixed grammatical form and lexical content. Despite the fact that that they are lexically fixed, most of these units are not true idioms but regular form-meaning pairings. Therefore, in order to be native-like in a language, language learners need to have these 'sentence stems'. For example, the sentence 'let me off the car' and 'halt the car' both have the same meaning; however, although the latter is a grammatical sentence, it is not preferred by the native speakers. Because the focus is generally on grammar in EFL classes, language learners may perform unnatural sentences like the latter (Shin and Nation, 2008). Brown (1974) also emphasizes the importance of chunks for L2 learners by stating that as learners learn collocations, they observe how native speakers use them in spoken and written contexts and the learners also use collocations themselves. Many studies have reached the same conclusion that using collocations appropriately is now a prerequisite to be a proficient language user (e.g., Cowie, 1998; Sinclair, 1991; Wray, 2002).

Despite the importance of collocations to L2 learners, even advanced level learners are not able to use them well while producing the target language (Granger, 1998; Howarth, 1998; Nesselhauf, 2003). Researchers have found that L2 learners use their creativity to produce expressions in the target language that native speakers would not use (Pawley and Syder, 1983; Wray, 2002). Bonk (2000) points out the fact that few generalizations can be made about the collocational restrictions in the

language (there are no general rules that learners can follow). Therefore, it is not an easy task to learn or teach them in a systematic and time-saving way. On the other hand, according to a small scale study by Zimmerman (1993), language teachers themselves are often unaware of collocation as a concept. As a result, they may not draw the students' attention to collocations during the lessons although collocations may be present in the teaching materials. Other researchers also point out the same fact that some language teachers do not include collocations in their lessons since they are not aware of collocation (Brown, 1974; Howarth, 1996).

2.4.1 Testing vocabulary: collocations

Different studies present different percentages related to the receptive and productive vocabulary knowledge of the learners. While Laufer (2005 a) found that learners know 16 % of receptive vocabulary productively at the 5,000 frequency level, some other studies reached the conclusion that at productive level learners only know about one-half to three quarters of receptive vocabulary (Fan, 2000; Laufer & Paribakht, 1998). The fact that there are different figures as to the receptive and productive vocabulary knowledge shows how difficult it is to come up with these figures (Schmitt, 2010). Schmitt (2010) gives two reasons why this difficulty exists. The first reason is that there is no accepted concept as regards receptive and productive issue. The second reason is related to measurement. Test types used to measure receptive and productive knowledge affect the results (Laufer & Goldstein, 2004).

There have been several attempts to test collocations which have been classified into two groups by Gyllstad (2007). These two groups are corpus-driven studies and experimental studies. Corpus-driven studies generally analyze learners' essays in corpora and try to make inventories of the errors produced by these learners (e.g. Cowie, 1998; Howarth, 1998; Laufer and Waldman 2011; Nesselhauf, 2005)

(Nizonkiza et al., 2013). The second way to test collocations, experimental studies, consists of both receptive and productive tests measuring the learners performance (Bonk, 2000; Gitsaki, 1996). To date, most of the empirical studies related to collocations have been conducted with unsystematic collocation tests without any detailed item analysis or test reliability and validity concerns (Alsakran, 2011). There are very few reliable and valid tests that have been prepared by researchers and can be used to test collocational knowledge of L2 English learners. Besides, Daller et al. (2007) state that due to the lack of consensus among the researchers about how to characterize collocational knowledge, the issue of testing collocations is still not standardized.

Bonk (2000) attempted to prepare a test to check the collocational knowledge of ESL learners at different proficiency levels. After piloting the test and checking its reliability and validity, two of the three subtests were found to work well. Bonk (2000) states that both cloze and selected response type items can be regarded as reliable ways of measuring collocations. After his attempts, some other researchers benefitted from his test in their studies (e.g. Alsakran, 2011).

Shehata (2008) devised two gap filling tests to test L2 learners' productive collocation knowledge in verb-noun and adjective-noun collocation types. She also designed an acceptability judgment test to test their collocation knowledge at receptive level. Cronbach's Alpha was used to check the reliability of the instruments and they were reliable (There will be more on this study later.). Yet, the collocations included in these tests were chosen as the ones with (congruent) and without Arabic equivalents (non-congruent). Therefore, these tests cannot be applied in all learning environments.

2.5. A review of studies on collocational knowledge of L2 learners

This section presents relevant studies to the present study in a chronological order.

Firstly, Gitsaki (1996) examined the development of collocational knowledge of ESL learners. It is a very comprehensive study in that it aims to describe how collocational knowledge develops across proficiency levels by including 37 collocation types with the participation of 275 Greek ESL learners. In the study, essay writing, translation test, and blank-filling tasks were used. According to the results of the statistical analysis, there are patterns of development of collocational knowledge across and within the different proficiency groups. In addition, collocational knowledge increases steadily as the level of proficiency increases, and grammatical collocations are easier to acquire than lexical collocations. The syntactic complexity of the collocation types, exposure and maturation influence the development of collocational knowledge.

Gitsaki (1996) proposed three stages for the development of collocational knowledge:

- The first stage: Collocations are acquired as unanalyzed lexical items.

 Therefore, learners are better at lexical collocations.
- The second stage: Grammatical knowledge of learners develops, so learners get better at grammatical collocations.
- The third stage: Learners can use both types of collocations more accurately than the first two stages.

Bonk (2000) criticizes Gitsaki in terms of the instruments that she used in her study since she did not include the reliability estimates and item analysis results for the collocations or proficiency tests.

The study done by Taeko (2005) had two main purposes: to identify the basic collocations for Japanese learners and to investigate the development of their collocational knowledge. To achieve the first purpose, high frequency verb-noun collocations which are used by native speakers of English were studied (BNC, TIME and *English I* textbook corpora were used as sources), and compared with high frequency collocations in English textbooks for Japanese secondary school students. After this corpus-based research, 61 collocations were finally selected as basic collocations.

To answer the second research question, three kinds of tests, a vocabulary size test, a productive collocation test, and a receptive collocation test with the 61 collocations identified were given to 130 university students.

The results show that there is a high positive correlation both between learners' general vocabulary knowledge and their collocational knowledge and between their receptive knowledge of collocations and their productive one. Moreover, the influential factors in receptive and productive knowledge were discovered. The vocabulary knowledge, L1 equivalence, delexicalized verbs and core meanings of verbs affect receptive knowledge.

In addition to these same factors that affect the receptive vocabulary, semantic opacity, core meanings of nouns and syntactic collocational structure affect students' productive knowledge of collocations. Lastly, the results emphasized the fact that learners cannot succeed in communication without collocations.

Durrant (2008) addressed three research questions in his study. First, he looked at to what extent high frequency of occurrence in a corpus indicated that collocations are independently represented in the minds of native speakers. A word association study, and a series of lexical decision studies show a limited relationship between frequency and representation.

The second research question focused on the idea that adult second language learners generally fail to retain the collocations that they are exposed to. A lab-based training study and a learner-corpus study were conducted. It was found that repeated exposure to collocations can improve learning dramatically.

The last research question aimed at compiling a list of frequent academic collocations if possible. It was found that it was possible, but important points need to be considered about the nature of the included collocations while preparing that list.

Shehata (2008) conducted a study to test the collocational knowledge of Arabic learners of English. The main aim of Shehata's study was to examine the role of L1 (Arabic in this study) on the use of English collocations of advanced Arabic learners of English at both receptive and productive level, the influence of the learning environment (EFL vs. ESL) and the influence of the amount of exposure to the target language (English).

Thirty-five Arabic-speaking learners of English in the United States and 62 undergraduate students from an English department in a university in Egypt participated in the study and took one vocabulary recognition test, one test that checks collocational knowledge at receptive level and two productive tests to check their collocational knowledge at productive level. The researcher prepared these tests herself after carefully selecting the collocations to be included. Adjective-noun and verb-noun collocation types were tested in these two tests. Cronbach's alpha was used for the reliability of these instruments.

The results of the tests show that both L1 and the learning environment have an influence on the acquisition of L2 collocations. The amount of exposure to the language also has a strong influence on the knowledge of collocations.

Alsakran (2011) conducted a study to examine the receptive and productive knowledge of advanced Arabic learners and the influence of the learning environment on the acquisition of collocations. Verb-noun, adjective-noun and verb-preposition collocation types were tested. At receptive and productive levels, verb-noun and adjective-noun collocations were tested with the instruments that Shehata (2008) prepared with some modifications. For verb-preposition productive test, Alsakran (2011) adopted Bonk's (2000) instrument. These three instruments were reliable. Their validity was checked via a pilot study.

The results show that the learning environment affects the acquisition of L2 collocations dramatically. The receptive performance of the participants was better than their productive performance. In addition, they performed better in verb-noun collocations.

2.6. Summary of the chapter

In summary, this chapter first covered what it means to know a word at receptive and productive level, and then, provided different approaches to the definition of collocations. The studies mentioned indicate the growing interest in collocations in learning a second language. The design of the present study will employ a design similar to the last two aforementioned studies (Alsakran, 2011; Shehata, 2008) in that it also aims to test L2 learners' collocational knowledge at both receptive and productive level via an acceptability judgment tests and a gap filling test.

CHAPTER 3

METHODOLOGY

3.1. Overview of the chapter

This chapter focuses on the methodology of the study. After the design of the study is explained, data collection and data analysis methods are presented. The instruments that are used in the study and their construction process as well as the procedures followed during the data collection process are explained in detail in order to present a clear picture of the overall process of the present study.

3.2. Research design and research methodology

In this section, the design of the study and the methodology of the research will be described.

3.2.1 Research design

This research study was designed to answer the following issues (Also see Page 6-7 in Chapter 1):

• The first research question aimed to find out whether there was a significant difference between PIN and ADV level learners in terms

of their collocational knowledge at receptive and productive level. To gather data on this issue, an acceptability test was prepared to test receptive knowledge of both PIN and ADV groups and a gap filling test was designed to test their productive knowledge.

- The second research question dwelled on the lexical and grammatical collocational knowledge of PIN and ADV learners separately and at both receptive and productive levels. The data from the acceptability judgment and the gap filling tests were analyzed to study whether each group was better at lexical or grammatical collocation types.
- The third research question was which collocation types the PIN and the ADV learners know the best. In order to answer this question, the data collected with the acceptability judgment and the gap filling tests were analyzed.

An acceptability judgment test and a gap filling test were designed as the main instruments to answer the research questions stated above. The tests were administered by the instructors in classes in two consecutive weeks. Participants were informed about the confidentiality of the collected data. The acceptability judgment test took approximately 15 minutes while the gap filling test took about 20 minutes. With the acceptability judgment and the gap filling tests administered, this research study grounded its methodology on quantitative research approach (See Table 3 below).

Table 3 Research questions, methods and instruments of the study

Research Question	Method	Instrument
1. Is there a significant difference between the PIN and the ADV students in terms of their: a) receptive knowledge of collocations? b) productive knowledge of collocations? c) the correlation between their receptive and productive collocational knowledge? d) performance in lexical and grammatical collocation types? e) performance in each of the four tested collocation types separately?	Quantitative	The acceptability judgment test and the gap filling test
2. At receptive and productive levels, do the PIN and ADV students know lexical or grammatical collocations better? 3. Out of the four tested	Quantitative	The acceptability judgment test and the gap filling test
collocation types, which one do the PIN students and ADV students know the best?	Quantitative	The acceptability judgment test and the gap filling test

3.2.2 Research methodology

Two offline tests were used to collect data in this study; therefore, quantitative approach was chosen as the methodology of this research. Quantitative methods include objective measurements. Quantitative research focuses on numerical data and generalizes it across groups of people. Numerical analysis is done with the data that is collected via polls, questionnaires or surveys (Babbie, 2010).

3.3. Setting and participants of the study

In this section of the study, the setting used and the participants included in the study are presented.

3.3.1 Setting of the study

The study was conducted at the preparatory school of a state university in Ankara. The spring semester during which the study was done consisted of 17 weeks. There are two spans in one educational term and at the beginning of each span teachers are provided with active vocabulary list that the students will be responsible for in the exam at the end of the span. In this active vocabulary list, words are included with their collocations. However, how much teachers dwell on these collocations is not certain since different teachers may allocate different amounts of time for them. Therefore, participants were selected from a variety of classes so that they came from different teachers.

The acceptability judgment test was given in the 13th week and the gap filling test was given in the 14th week of the educational term to both groups.

3.3.2 Participants of the study

The participants of the study were English preparatory class students at the state university where the study was carried out. Similar to many other universities in Turkey whose medium of instruction is English, this university also requires a certain level of proficiency in English from the students as a prerequisite to start studying in their departments. Therefore, for one year, the students are given English lessons at different levels at the preparatory school. The students are chosen for each level according to the placement exam that they sit before the educational term starts. According to their scores, they are placed at different levels. There are two educational terms and each term students at each level are given two midterms (which are achievement tests that test students' knowledge related to the taught subjects in the curriculum).

In this study, the participants were from PIN (which was beginner level in the first term) and ADV levels (which was upper-intermediate level in the first term). All participants from PIN level started to learn English at the fourth grade in a state school whereas in ADV level, some students started learning English like PIN level participants, but some of them started to learn it at the first grade in a private school. Among the students at PIN level, the ones to be included in the study were selected according to their first midterm results in the second term from 11 different classes among the 54 PIN classes present at that term. The average of the first midterm was 56 at PIN level, so 34 students whose midterm grades were between 56 and 76 were selected as participants.

The case was not the same for ADV level students since there were fewer ADV classes, 7 in total. In addition, among ADV group students, the midterm results of the students were very close to overall ADV group midterm average. Thus, in the main study ADV students come from 4 of these 7 classes regardless of their midterm results

All participants were between the ages of 18-20 and their mother tongue was Turkish. With regard to gender, there were 17 males and 17 females in the PIN group and 18 males and 16 females in the ADV group.

3.4. Data collection instruments and the procedure of the study

In this section, first the design of the instruments used to collect data is explained in detail, and then, the procedure followed to collect and score the data is reported.

3.4.1 Selection of collocations

Both the acceptability judgment and the gap filling tests include four different collocation types to be tested which are verb-noun, adjective-noun, adjective-preposition and noun-preposition. The first two are lexical and the last two are grammatical collocation types.

Out of the 33 collocation types categorized by Benson et. al (2010), 4 of them are chosen to be included in the tests after a mini survey conducted among 35 EFL teachers who have been teaching English at university level for 1-5 years. In this survey there were 4 multiple choice questions. In the first two questions the teachers are asked to choose the collocation type that they think ADV learners learn more easily. As alternatives, the first question has grammatical collocation types and the second question has lexical collocation types. Not all 33 collocation types from BBI dictionary (2010) are included in the alternatives. The collocation types that can be tested more easily than the others are chosen by the researcher keeping in mind that the collocation types included in previous studies should be included in the alternatives. The other two questions are for PIN learners and their alternatives are

the same as in the first two questions (See Appendix A for this mini survey). According to the results of the survey, verb-noun, adjective-noun, adjective-preposition and noun-preposition collocation types are included in the study.

3.4.1.1 Selecting collocations for the acceptability judgment test

The acceptability judgment test, which includes 28 correct and 28 incorrect collocations, was adapted and developed from Shehata's test (2008). Shehata (2008) focused on verb-noun and adjective-noun collocation types in her study. She selected 16 verb-noun and 16 adjective-noun collocations. Half of these collocations were congruent (they had literal Arabic equivalents) and half of them are non-congruent (they did not have literal Arabic equivalents). She also included 18 distracters, so she prepared an acceptability judgment test with 50 items.

It has not been possible to use her test as it is since the research focus is different in that study (she focused on L1 effect on the acquisition of L2 collocations) and not all collocation types the present study includes are included in Shehata's test. However, some correct and incorrect items that include non-congruent collocations from that test were chosen as the starting point for the preparation of the acceptability judgment test of this study. The test has the same style with her test with the following differences:

- The present study's test would include 56 items (14 verb-noun, 14 adjective-noun, 14 adjective-preposition, and 14 noun-preposition).
- The tested collocations would not be divided into congruent/non-congruent categories.
- There would not be any distracters in order not to create fatigue since there will be 56 items. Moreover, as there were no categories within the collocation

types (as congruent and non-congruent), distracters were not found to be necessary.

See Table 4 below for the collocations taken from the test prepared by Shehata (2008).

Table 4 The collocations taken from the acceptability judgment test by Shehata (2008)

	Correct Collocations	Incorrect	
		Collocations	
verb-noun	play a role	*put the risk	
	make a mistake	*get success	
	eat soup		
	catch fire		
	take advantage		
adjective-	second thought		
noun	short cut		
	last chance		
	soft drinks		
	heavy traffic		

To the best of my knowledge, there were no frequent collocations list that could be made use of for the present study's tests. Therefore, the collocations to be included in this test other than the ones that were taken from Shehata's test (2008) were chosen by following the steps explained below briefly. These steps were followed to find verb-noun, adjective-preposition and noun-preposition collocations. For adjective-noun collocations, a slightly different way was used which is explained later in detail.

3.4.1.1.1 Selecting correct collocations

Apart from the 10 correct collocations that were taken from Shehata's test (2008), other 18 collocations were selected by following these steps: To begin with, frequent verbs, adjectives and nouns are selected from the frequency verb, adjective and noun lists from the companion website for the book *Word Frequencies in Written and Spoken English: based on the British National Corpus* (Longman: 2001).

Then, in order to find the nouns that collocate with these common verbs, the prepositions that collocate with these common adjectives and nouns, Google Ngram program was used (https://books.google.com/ngrams/). In this program, there are 22 corpora from 8 different languages. This program charts the yearly count of selected n-grams (letter combinations) or words and phrases, from over 5.2 million books that had been digitized by Google up to 2008. Recently, they have added books from 2009. It provides its users with the words that appear the most frequently when the relevant formula is written. For instance, for the formula: drink =>*_NOUN, the following graph (See Figure 2) is retrieved by the program:

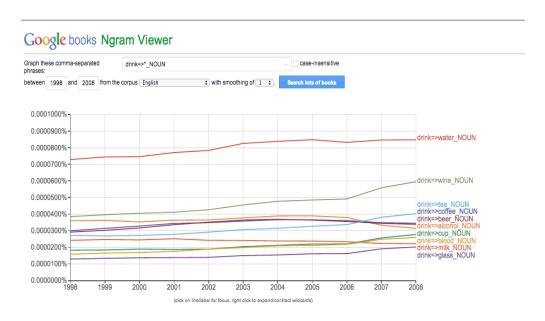


Figure 2 A sample graph that shows the frequent nouns used with the verb 'drink'

When you type 'drink tea, drink coffee, drink milk, drink water', this program provides you with a graph that shows the frequency of the collocations in your formula. See Figure 3 below:

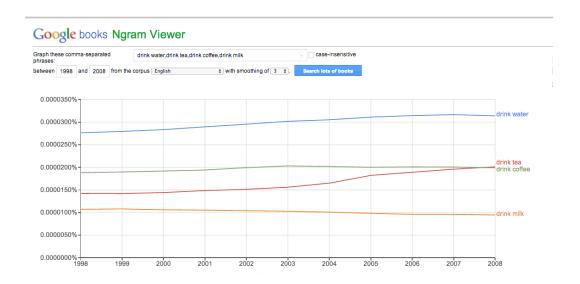


Figure 3 A sample graph that shows the frequencies of the collocations in the formula

Firstly, the first formula was typed with one the most frequent words in the above mentioned lists. If the most frequent collocation that Ngram yielded in its graph existed in BBI dictionary, this collocation was included in the test. If the frequent collocations that Ngram provided did not exist in BBI dictionary (2010), the second formula was written with the existing collocations in BBI dictionary (2010). Then, among these collocations the most frequent one was selected for the test.

For the adjective-noun collocations, though, the process was different since it was not easy to find enough number of collocations having similar criteria as the other three collocation types to be tested. Therefore, apart from the ones that had been found by following the three steps above, the adjective-noun collocation list consisting of 88 adjective-noun collocations prepared by Shehata (2008) was used and the most frequent adjective-noun collocations were chosen from that list. Shehata (2008) came up with this list after scanning the previous studies that had been done in the field in order to gather all the adjective-noun collocations used.

3.4.1.1.2 Selecting incorrect collocations

Apart from the 2 incorrect collocations that were taken from Shehata's test (2008), the other 26 incorrect collocations (7 samples of each collocation type) were collected from the 35 EFL teachers who participated in the mini survey at the beginning of the study. They provided the researcher with actual collocational errors made by Turkish learners of English learning English at university at different levels. Due to the fact that there were not enough number of incorrect collocations for certain types, the researcher made some of them up by making sure first that they did not exist in the BBI dictionary (2010), and then, in the *British National Corpus* (See Table 5 for the incorrect collocations included in the acceptability judgment test). Both the correct and incorrect collocations gathered in this way were checked by two

different native speakers. These native speakers were both EFL teachers for more than 10 years and used American English.

Table 5 The correct and incorrect collocations included in the acceptability judgment test

	Correct Collocations	Incorrect Collocations	
verb-noun	have difficultyput an end	 make advice do a difference do panic gain money say a lie 	
adjective-noun	fresh fruitbeneficial effect	 helpful time useful people clean information last technology strict cold original tongue stressful person 	
adjective- preposition	 successful in serious about important for late for sorry about open to free from 	 careful towards bad with different at necessary with poor on rich on tired on 	
noun-preposition	 member of loss of reason for respect for solution to research on home to 	 need about problem through experience about decrease at influence towards interest about attitude through 	

3.4.1.2 Selecting collocations for the gap filling test

Owing to the fact that same participants were to take both tests, the collocations included in the gap filling test were different from the ones in the acceptability judgment test. The same four collocation types (verb-noun, adjective-noun, adjective-preposition, noun-preposition) that were chosen after the mini survey were included in the gap filling test as well. The same three steps which were followed while choosing the correct collocations for the acceptability judgment test were also followed to select all the collocations to be included in the gap filling test (see Table 6 for the collocations used in gap filling test).

Table 6 The collocations used in the gap filling test

	verb-noun	adjective-noun	adjective-	noun-
			preposition	preposition
1	do business	close friend	bad for	comment on
2	have a look	strong competition	important to	admiration for
3	make an effort	long journey	high in	demand for
4	keep a diary	poor visibility	good at	side to
5	give birth	fresh coffee	full of	history of
6	hold hands	severe pain	similar to	use for
7	speak a language	daily life	essential for	answer to
8	live a life	significant difference	responsible for	degree in
9	run a business	heavy rain	sure of	pressure on
10	take time	great importance	effective in	benefit from
11	tell a story	detailed analysis	happy for	relationship
				with
12	pay attention	general rule	aware of	change in

3.4.2 Preparation of the tests

After selecting the collocations to be included, the sentences for each item in both tests were chosen and adapted from the British National Corpus. The sentences in the acceptability judgment test included a total number of 8 to 15 words. However, the sentences in the gap filling test were longer (15-30 words) than those in the acceptability judgment test since the participants were expected to produce words in the gap filling test and therefore needed more contextual cues.

3.4.2.1 Test validity

After the sentences were ready, the tests were given to four different experts to comment on their validity. All the experts were from EFL field. One of the experts is a teacher who holds a Master's degree in Assessment and Evaluation and has been teaching English at university level for four years. The second expert has taught English for 10 years and has been working as the ADV level's tester for one year in the university where the present study was conducted. She also has a Master's degree in ELT. The third expert has been an EFL tester in the same institution for 10 years. The last expert is also an EFL teacher who has been working as a tester for one year and has taught English for 14 years. She also has a Master's degree in ELT.

All four experts were given a table to comment on each item separately and were asked to give additional feedback on the tests if necessary. After their comments, some collocations and their sentences underwent some changes. Some words that the experts thought would be difficult to understand by the participants were replaced by more frequent words again selected from the same frequency lists.

3.4.2.2 Test reliability

So as to check the reliability of the tests, they were piloted. The acceptability judgment test was given to 20 PIN and 15 ADV students not participating in the main study. According to the results of the pilot study, it was found that the responses for the first questionnaire were highly reliable with a Cronbach's Alpha of 0,883.

There were different approaches to gap filling tests in the previous studies. Some researchers provided the test takers with the first letter of the expected word when it was a content word (e.g. verb, noun) (e.g. Laufer & Nation, 1999; Alsakran, 2011) while some others did not do so (Shehata, 2008). Therefore, while piloting the present study, the researcher gave the gap filling test to 20 ADV level learners without providing them with the first letter of the expected content word. However, the results of this pilot test showed that participants came up with too many alternatives that were not easy to judge. As a result of this, the researcher decided to put the first letter of each content word in the gap filling test and did another pilot study. The second pilot version of the gap filling test was given to 25 PIN and 25 ADV students not participating in the main study and the results of this pilot study showed that its Cronbach's Alpha was 0,866. According to Kline (2000), alpha scores "should ideally be high, around .9" (p. 13) and they should not drop below .7, so it can be said that the test is highly reliable.

After the pilot study, the time given for each test was shortened since it was observed that participants finished the tests earlier than expected. Then, to make sure that there is no difficult grammatical structure nor a difficult word especially for the PIN level learners that may hinder their understanding the whole sentence, each test was given to 5 more PIN students and after they finished the tests, they were asked to comment on the items in both tests. The aim here was to make sure that there was no word or grammar structure that affected their understanding of the context negatively. It was

also made sure by asking these 5 students that there were no unknown words in collocations. It was not a problem if they did not know that these words collocated with each other but the important point was that they were all supposed to know all the words that formed all 104 collocations included in the tests (See Appendix B for the last version of the acceptability judgment test, see Appendix C for the last version of the gap filling test).

3.4.3 Administration of the tests

The acceptability judgment test was given to 11 PIN classes and 4 ADV classes in the 13th week of the spring semester in DBE, METU. First, the participants were given a consent form (See Appendix D for the consent form). Then, they completed a short demographic questionnaire. After that, all participants were given 15 minutes to complete the test. They were all given the test during the class hour and their classroom teacher was there to monitor them.

The gap filling test was given in the 14th week of the educational term to both groups and the participants were given 20 minutes to do it. Before they started the test, they were asked to fill in the same demographic questionnaire again so as to match the same participants that took both tests.

3.4.4 Data scoring

After the researcher prepared the answer key of the acceptability judgment test according to BBI dictionary, she had it checked by the same two native speakers so as to make sure that there were no other possible answers for each blank.

The data collected from the acceptability judgment test was scored as correct or incorrect because there were only two possibilities to choose from. The items that were left blank were also counted as incorrect.

In the gap filling test, the data was scored as correct or incorrect as well because there were fixed answers for each blank and the unanswered questions were counted as incorrect. Because the lexical choice of the participants was the main point, if they made a morphological error such as the use of verb tenses as in *kept* instead of *keep*, it was ignored. However, such instances were not very common since the items were prepared such that the verbs were required to be written in their base form for each sentence. In the section where the participants were required to write an adjective, only in item 24, some participants wrote the noun form of the expected adjective (*detail* rather than *detailed*) and it was also counted as correct since they remembered the correct word despite its wrong form.

3.4.5 Reliability of the latest version of the tests

Apart form the SPSS reliability analysis conducted on the pilot version of the tests, another reliability analysis was conducted in order to check the reliability of the latest version of the two tests. According to this analysis, both tests are highly reliable: We obtained coefficients of 0,808 for the acceptability judgment test and 0,926 for the gap filling test. Item-Total Statistics provide the contribution of a particular item to the total test. In the column of "Cronbach's Alpha if Item Deleted.", contribution of the item to the entire test can be seen (See Appendix E for the reliability scores of the acceptability judgment test, see Appendix F for the reliability scores of the gap filling test).

3.5. Data analysis methods

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) 22.0 for Windows software package. The analysis was carried out based on the research questions. Descriptive statistics, independent samples t test, correlation, one way ANOVA, Tukey and multiple correspondence tests were used where relevant.

CHAPTER 4

RESULTS

4.1. Overview of the chapter

This chapter presents the statistical analysis results of the study. The study consists of quantitative data collection methods. The quantitative findings of the data are analyzed using SPSS 22.0 (Statistical Package of Social Sciences) and interpreted using descriptive and inferential statistics. The statistical significance level is used as $\alpha < .05$ for all the independent sample findings. Descriptive statistics of meta, sub and sub-sub factors are given to interpret test outputs more deeply. The meta factor is the English level of the participants; PIN and ADV. There are two sub factors. These are lexical and grammatical collocation categories. The sub-sub categories are the four tested collocation types, which are adjective-noun, verb-noun, adjective-preposition and noun-preposition collocations. From this section on, the results of the acceptability judgment test will be referred to as the receptive knowledge of the participants whereas the results of the gap filling test will be called the productive knowledge of the participants.

4.2. Comparison of the performances of the PIN and the ADV groups

The first research question of this research study is whether there is a significant difference between the PIN and the ADV students in terms of their

- a) receptive knowledge of collocations.
- b) productive knowledge of collocations.
- c) the correlation between their receptive and productive collocational knowledge.
- d) performance in lexical and grammatical collocation types in the acceptability judgment and the gap filling test.
- e) performance in each of the four tested collocation types in the acceptability judgment and the gap filling test.

When the means of the overall performance of the PIN and the ADV students in the acceptability judgment test are compared, it can be seen that the ADV students have higher scores (M: 76.89) than the PIN students (M: 54.31) at receptive level. The case is the same with the gap filling test. The mean of the ADV students (M: 72.74) is higher than the PIN students (M: 38.86) at productive level. (See Appendix G for the tables which display information about mean scores and standard deviations of the meta, sub, sub-sub factors).

A part of the question was whether there was a significant correlation between receptive and productive collocational knowledge of PIN and ADV group. Pearson's correlation coefficient is a measure of linear association. It estimates the correlation coefficient between two variables ignoring the effect of all other variables. The correlations can vary from -1,0 (a perfect negative relationship) to +1,0 (a perfect positive correlation). For the PIN group, the sig (2-tailed) value is greater than .05, i.e., the correlation between receptive and productive knowledge is not statistically

significant. For the ADV group, however, the sig (2-tailed) value is smaller than .05, i.e., the correlation is statistically significant (See Appendix J for correlation tables).

The comparison of the means of both groups in lexical and grammatical collocations at receptive and productive level shows that the ADV group has higher means in all four categories (See Figure 4 below).

Descriptive Statistics of Sub Groups

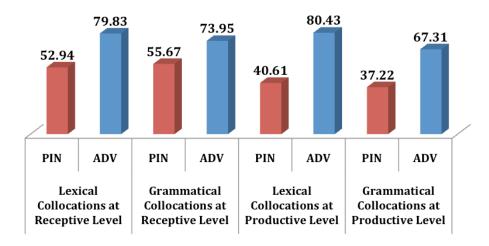


Figure 4 Descriptive statistics of sub groups

When both groups are compared in terms of their performances in 4 different tested collocation types, the ADV students outperform the PIN students in all collocation types:

a) at receptive level

Descriptive Statistics of sub-sub Groups at Receptive Level

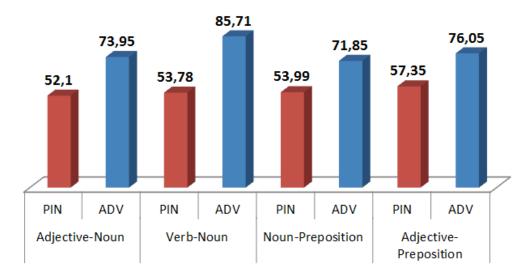


Figure 5 Descriptive statistics of sub-sub groups at receptive level

b) at productive level

Descriptive Statistics of sub-sub Groups at Productive Level

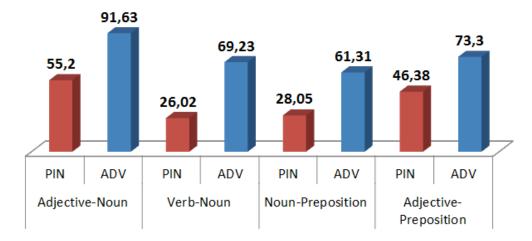


Figure 6 Descriptive statistics of sub-sub groups at productive level

After descriptive statistics, independent samples t-test is conducted to evaluate whether the differences in the means are significant. This analysis is done to find out if there is any significant difference between the two groups. Interpretation of the independent t-test table is a two-stage process. When the Sig (2-tailed) values are smaller than our specified alpha value of .05, it can be concluded that there is a significant difference between two groups. According to the results of the independent samples t-test, it can be claimed that there are significant differences between the PIN and the ADV students in all meta, sub and sub-sub factors (See Appendix H for the detailed results of independent samples t-test).

4.3. Comparison of participants' performances in lexical and grammatical collocations within the PIN and the ADV groups

The second research question seeks to determine whether within their own groups, the PIN and the ADV group learners perform better in lexical or grammatical collocations. In order to accomplish this aim, apart form descriptive statistics, the results of both the acceptability judgment and the gap filling tests are analyzed via paired samples t-test.

4.3.1 Comparison of the performances in lexical and grammatical collocations within the PIN group

Descriptive statistics present the performance of the PIN group at both receptive and productive level as shown in the following graph:

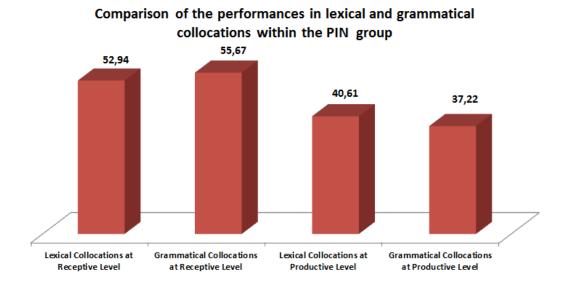


Figure 7 Comparison of the performances in lexical and grammatical collocations within the PIN group

Two different independent samples t-test were conducted in order to see whether there is a significant difference between the PIN group's performance in lexical and productive collocations at both receptive and productive levels.

At receptive level there is not a significant difference in the scores of the PIN group for lexical (M:52.94, SD:8.176) and grammatical collocations (M: 55.67, SD:8.62) (t(66)=-1.34, p=.185).

At productive level there is not a significant difference in the scores of the PIN group for lexical (M: 40.61, SD: 13.56) and grammatical collocations (M: 37.22, SD: 12.11) (t (66)= 1.088, p= .281).

4.3.2 Comparison of the performances in lexical and grammatical collocations within the ADV group

The descriptive statistics in figure 8 present the performance of the ADV group at both receptive and productive level as shown in the graph below:

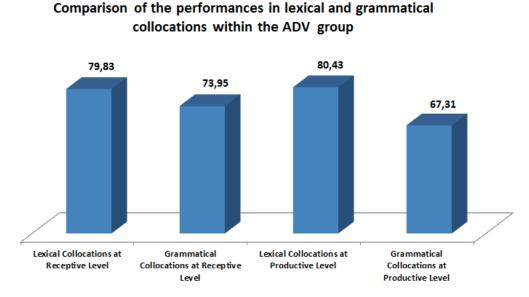


Figure 8 Comparison of the performances in lexical and grammatical collocations within the ADV group

Two different independent samples t-test were conducted in order to see whether there is a significant difference between the ADV group's performance in lexical and productive collocations at both receptive and productive level.

At receptive level there is a significant difference in the scores of the ADV group for lexical (M:79.83, SD:8.474) and grammatical collocations (M:73.95, SD:10.607) (t (66)= 2.527, p= .014).

At productive level there is a significant difference in the scores of the ADV group for lexical (M:80.43, SD: 12.646) and grammatical collocations (M:67.31, SD: 12.570) (t (66)= 4.291, p= .000).

4.4. Performances of both groups in the tested collocation types

The third research question is related to both groups' performances in the four tested collocation types in both tests. The results of the PIN and the ADV group were analyzed separately. The aim here is to reveal whether out of the four tested collocation types, participants perform better in one collocation type than in the others. Descriptive statistics and a one-way analysis of variance (ANOVA) were conducted to evaluate the relationship between sub-sub groups. One way ANOVA evaluates the difference in general. Since the research question is about which categories differ from each other, Tukey test, which is one of the most used multiple pairwise comparison tests, was also used after one way ANOVA.

4.4.1 The PIN group's performance in each collocation type

In this section, the results of one way ANOVA test which analyzed the performance of PIN group participants in sub-sub groups are reviewed. The sub-sub groups here are the tested collocation types, which are verb-noun, adjective-noun, adjective-preposition, and noun-preposition collocations. The aim is to find the collocation type in which the PIN group performed the best. The collocation type in which they showed the best performance was analyzed at receptive and productive level separately.

a) At receptive level

At receptive level, the results of one way ANOVA is 0,292, so we reject our null hypothesis that there is no significant difference between sub-sub groups for the PIN level participants (See Appendix K for the ANOVA results of the PIN group).

b) At productive level

At productive level, the ANOVA result is .000; i.e., there is a significant difference in general between sub-sub categories in PIN group (See Appendix K for the ANOVA results of the PIN group at productive level). Then, Tukey test was performed to discover the sub-sub group that the PIN group was better at (See Appendix K for the results of Tukey test for the PIN group at productive level). The results show there is a significant difference between the sub-sub group pairs. In order to find out the sub-sub group in which the PIN level participants performed the best, the two sub groups which have the highest mean scores were selected, which are verb-noun (M: 55.20) and adjective-preposition (M: 46.38). Then, the result of this pair out of Tukey test was analyzed and it shows that there is a significant difference between the two.

In addition to the descriptive statistics, a correspondence analysis was carried out to see whether a certain collocation type signifies each group (See Appendix K for the correspondence analysis results). Correspondence analysis is a technique that represents graphically the row and column categories and allows for a comparison of their correspondences, or associations, at a category level (Beh, 2004). In order to have a correspondence analysis of the present data, the scores of all 68 participants are ordered for the acceptability and the gap filling tests separately, and then, these scores from the lowest to the highest are divided into three categories. These categories are called 'low, middle, high'. Only one category signified the PIN group

which was the low noun-preposition category at productive level. The low performance of the PIN group in noun-preposition collocations at productive level shows that it is an indicative feature of this group.

4.4.2 The ADV group's performance in each collocation type

In this section, the results of one way ANOVA test which analyzed the performance of ADV group participants in each collocation type are reported. The aim is to find the collocation type in which they performed the best. The collocation type in which they showed the best performance is provided separately at receptive and productive level.

a) At receptive level

One way ANOVA test results yielded .000; i.e., there is a significant difference in general between the sub-sub groups of ADV at receptive level (See Appendix L for the results of ANOVA for the ADV group at receptive level). Then, Tukey test was conducted to select the best performed collocation type by the ADV students at receptive level (See Appendix L for the results of Tukey test for the ADV group at receptive level). Since there are significant differences between more than one pair, the pair whose mean is the highest was chosen (verb-noun (M: 85.71) & adjective-preposition (M: 76.05)). There is a significant difference between these means; therefore, verb-noun collocation type is the collocation type in which ADV level learners performed the best by the ADV group participants at receptive level.

b) At productive level

One way ANOVA tests yielded .000; therefore, there is a significant difference in general between the sub-sub groups of ADV at productive level (See Appendix M for the results of Tukey test for the ADV group at productive level). After this significant difference is found in general, Tukey test was carried out. According to the results of the Tukey test, the ADV group participants showed the best performance in verb-noun collocations at productive level (See Appendix M for the results of Tukey test for the ADV group at productive level).

Besides the descriptive statistics, a correspondence analysis was made as it has already been explained in the previous section (See section 4.5.1). According to the results of this test, only one category, high adjective-noun, signifies the ADV group at receptive level (See Appendix I for the correspondence analysis result).

See Table 7 below, which is a summary of the results of the statistical analysis according to the research questions.

Table 7 Summary of the results

Research Questions	Instruments	Results
1. Is there a significant difference between the PIN		
and the ADV students in terms of their:		• significant (in a, b, d,
a) receptive knowledge of collocations?		e sub categories)
b) productive knowledge of collocations?	The	
c) the correlation between their receptive and	acceptability	 no correlation in PIN
productive collocational knowledge?	judgment and	group.
d) performance in lexical and grammatical	the gap filling	
collocation types?	tests	 significant
e) performance in each of the four tested		correlation in ADV
collocation types separately?		group
2. At receptive and productive levels, do the PIN		PIN group- receptive level:
and ADV students know lexical or grammatical		no significant difference
collocations better?	The	PIN group productive level:
	acceptability	no significant difference
	judgment and	ADV group receptive level:
	the gap filling	significant difference in
	tests	lexical collocations
		ADV group productive level:
		significant difference in
		lexical collocations
3. Out of the four tested collocation types, which		PIN group receptive level: no
one do the PIN and the ADV students know the	The	significant difference
best?	acceptability	PIN group productive level:
	judgment and	significant difference in verb-
	the gap filling	noun collocations
	tests	ADV group receptive level:
		significant difference in verb-
		noun collocations
		ADV group productive level:
		significant difference in verb-
		noun collocations

CHAPTER 5

DISCUSSION OF THE RESULTS

5.1. Overview of the chapter

This chapter focuses on the discussion of the results obtained from statistical analysis results. First, the two groups' performances are compared and analyzed in the light of the results. Then, the performance of the PIN and the ADV group are discussed respectively according to the order of the research questions.

5.2. Comparison of PIN and ADV groups

The first research question was related to the comparison of the performances of the PIN and the ADV groups in terms of five different points. These points were:

- a) receptive knowledge of collocations
- b) productive knowledge of collocations
- c) the correlation between their receptive and productive collocational knowledge
- d) performance in lexical and grammatical collocation types
- e) performance in each of the four tested collocation types (verb-noun, adjective-noun, adjective-preposition, noun-preposition)

This research question with its sub questions will be discussed below under two headings: receptive level and productive level.

a) Receptive level

In order to compare the two groups' collocational knowledge at receptive level, they were given an acceptability judgment test. When the overall means of the PIN group (M:54.31) and the ADV group (M:76.89) in the acceptability judgment test are compared, it can be seen that the ADV group performed better than the PIN group.

When the same test's scores are analyzed via descriptive statistics and independent samples t-test, it was found that the ADV group again outperformed the PIN group in terms of both their lexical and grammatical collocational knowledge. The ADV group was also more successful than the PIN group in all the four tested collocation types.

b) Productive level

To compare the collocational knowledge of both groups at productive level, both groups sat a gap filling test. When the scores of this test were analyzed, the result was similar to that of the acceptability judgment test. The ADV group (M: 72.74) showed a better performance in this test than the PIN group (M: 38.86) did. Thus, there is a significant difference between PIN and ADV groups in terms of their performances at productive level.

In terms of their performance in lexical and grammatical collocations separately, there was again a significant difference. The ADV group again had higher scores than the PIN group. When the scores of both groups were analyzed with regards to their performance on each tested collocation type, the ADV group was more successful.

Unlike the poorly performing PIN group participants, there is no participant at ADV level who showed poor performance in collocations in all tested parts in both tests included in the study. Owing to this fact, as Bahns (1993) and Bonk (2000) state, it can be concluded that a good level of collocational knowledge may be regarded as one of the last stages of second language acquisition.

While assessing the validity of both tests, apart from native speakers and experts, some PIN level students were also asked to comment on the tests. They were asked whether they knew the words that comprised of the collocations and they stated that they knew these words separately. Therefore, it can be concluded that while learning a new vocabulary item, the learners especially at lower levels do not learn which words collocate with that item. This point can be explained by the argument that Foster (2001) proposed. Foster (2001) argues that as opposed to native speakers, non-native speakers develop most of their language not with lexicalized routines, but by rules. Therefore, because they learn words without paying attention to the words that can be used with them, when they try to produce a collocation, they might come up with wrong collocations. The results of the PIN group also confirm this because although the words in both the acceptability judgment and the gap filling tests were supposed to be known by them, their poor performance in both tests indicate that they do not know the words that collocate with these words.

The fact that the PIN group did not do well as much as the ADV group did does not mean that the PIN group does not have a certain knowledge level of collocations. As Bonk (2000) also puts forward, lower level learners also have, though limited, knowledge of collocations. Hence, it is worth analyzing the performance they showed in both tests in this study as well.

Lastly, in the PIN and the ADV group respectively, it was analyzed whether there was a correlation between their receptive and productive knowledge. According to the Pearson correlation coefficient, there is no correlation between receptive and

productive knowledge of collocations at PIN level. In other words, no relationship exists between receptive and productive collocational knowledge at PIN level.

The statistical analysis shows that there is a statistically significant correlation between receptive and productive knowledge of collocations at ADV level. That is, the better performance the ADV group show at receptive level, the better their performance is at productive level.

The fact that in the ADV group there is a correlation between the collocational knowledge at receptive and productive levels may indicate that a certain level of collocational knowledge exists in ADV level. In the PIN group, there is no correlation between the collocational knowledge at receptive and productive levels. This may be interpreted as there is not a certain level of collocational knowledge in PIN level in that if there was a certain level of collocational knowledge, their performance at receptive level would be expected to be higher than that at productive level.

5.3. Performance in lexical and grammatical collocations

The second research question aimed at finding out whether the PIN and the ADV group would show a better performance in lexical or grammatical collocations. Each group's performance on this issue will be analyzed below separately.

a) The PIN group

At neither receptive nor productive levels, there was a significant difference between the knowledge of lexical and grammatical collocations. This result may be attributed to the overall poor performance of PIN group at both receptive and productive levels.

b) The ADV group

Unlike grammatical collocations which include a preposition as one of its main elements, lexical collocations do not include prepositions and are comprised of content words only and the ADV group showed a significantly better performance in lexical collocations at both receptive and productive levels. This may be explained by the fact that the native language of the participants in the present study is Turkish and Turkish does not have prepositions. The status of 'prepositions' in different languages generally cause problems (Saint-Dizier, 2006). Some languages such as English and German are preposition languages, but some others like Turkish and Japanese are postposition languages. For example, whereas in English there are specific prepositions that come in front of the word that is modified, in Turkish there are no prepositions. Instead, there are suffixes, also called postpositions, that are added at the end of the words to be modified. Therefore, it can be concluded that this difference between English and Turkish led to the result that their lexical collocational knowledge is better than grammatical one.

5.4. Performance in each collocation type separately

In this section, both groups' performances in each tested collocation type are dwelled on so as to see in which collocation type they performed the best. Now, this issue will be explicated for the PIN and the ADV group respectively.

a) The PIN group

At receptive level, PIN group did not show a significantly better performance in any collocation type. The highest mean was in adjective-preposition collocations (M: 57.35); however this mean was very close to the means of other collocation types.

Thus, no collocation type can be regarded as the collocation type in which the PIN group participants performed the best.

At productive level, on the other hand, PIN group's performance on verb-noun collocations was far better than their performance in the other three collocation types, and the difference was significant. This result is consistent with some other studies that also found that participants performed best in verb-noun collocations (Alsakran, 2011; Shehata, 2008). Additionally, according to the correspondence analysis, poor performance in noun-preposition collocations is a feature of PIN group learners at productive level. That is, PIN group students are not good at noun-preposition collocations in general. However, there is no collocation type that signifies the PIN group at receptive level.

b) The ADV group

The ADV group performed the best on verb-noun collocations at both receptive and productive levels, and this was confirmed by statistically significant results. As stated above in PIN group's section, better performance on verb-noun collocations is in line with the previous studies (Shehata, 2008; Alsakran, 2011). Moreover, according to the results of the correspondence analysis, high performance in adjective-noun collocations signifies ADV group learners at receptive level. In other words, high performance in adjective-noun collocations at receptive level is a feature that represents ADV level. The results revealed no collocation types specifically for ADV group at productive level.

CHAPTER 6

CONCLUSION

6.1. Overview of the chapter

This study has six main chapters. The first chapter, *Introduction*, includes the purpose and the significance of the study and introduces the research questions. The second chapter, *Review of Related Literature*, first talks about what it means to know a word, and continues with the definition of the term "collocation" from different perspectives. Then, the importance of collocations is dwelled on and the chapter finishes with a snapshot of the studies that are relevant to the present study. The third chapter is *Methodology*, in which the research design of the study is explained and information about its participants, setting and instruments is given. The fourth chapter, *Results*, provides the statistical results of the tests. The fifth chapter is *Discussion*, where the statistical results are analyzed in detail. Lastly, this chapter summarizes the results of the study. The summary is followed by the limitations of the study, implications for further research and pedagogical implications.

6.2. A brief summary of the hypotheses and results of the study

This section recapitulates the results of the present study by focusing on the research questions one by one.

6.2.1 Comparison of the PIN and the ADV groups

The first research question was:

- Is there a significant difference between the PIN and the ADV students in terms of their:
 - a) receptive knowledge of collocations?
 - b) productive knowledge of collocations?
- c) the correlation between their receptive and productive collocational knowledge?
 - d) performance in lexical and grammatical collocation types?
- e) performance in each of the four tested collocation types (verb-noun, adjective-noun, adjective-preposition, noun-preposition)?

Gitsaki (1996) and Bonk (2000) suggest that collocational knowledge increases along with the proficiency level of a learner. Supporting these results, the findings of the present study showed that the ADV group was better than the PIN group in the sub categories 'a, b, d, e' of the research question.

The findings also revealed that there is no correlation between receptive and productive knowledge in the PIN group. On the other hand, there is a correlation between receptive and productive knowledge of the ADV group.

Although it is not asked as a separate research question, the results suggest that the receptive knowledge of collocations of the learners is broader than their productive knowledge, which is similar to the findings of the previous studies (e.g. Gitsaki, 1996; Alsakran, 2011).

6.2.2 Performance in lexical and grammatical collocation types

The second research question was:

 At receptive and productive levels, do the PIN and ADV students know lexical or grammatical collocations better?

At neither receptive nor productive levels, the PIN group showed a significant difference in the performance of lexical or grammatical collocations. On the other hand, the ADV group performed significantly better in lexical collocations at both receptive and productive levels.

6.2.3 Performance in specific collocation types

The third research question was:

 Out of the four tested collocation types, which one do the PIN and the ADV students know the best?

The results showed that the PIN group at productive level and the ADV group at both receptive and productive levels performed the best in verb-noun collocations, which is in line with the previous empirical studies (Shehata, 2008; Alsakran, 2011).

6.3. Limitations of the present study and implications for further research

As it has been mentioned in the previous chapters, the main goal of the present study is to describe the collocational knowledge of university level Turkish EFL learners. Although we got quite promising results, the study is not without limitations. To begin with, all of the participants study at the same university. To get more generalizable results, the study can include participants from different universities.

In the study, to select the participants, the categorization of the language levels in the English Preparatory School and the results of different levels' midterm exams (achievement tests) were used. Using the same proficiency test for all the participants can increase the reliability of the study. Moreover, The number of the participants can be higher in order to get better results. The present study has 34 PIN and 34 ADV participants. As a matter of fact, the numbers could have been higher since more students took the first test. However, in the following week, when the second test was given, there were fewer students in the institution due to a national disaster which occurred during that week in Turkey. In order to get valid results, only the participants who took both tests were included; therefore, the total number of the participants decreased.

The present study only used one instrument to test receptive collocational knowledge and one instrument to test productive collocational knowledge. Both of these instruments were offline tests. More tests on measuring collocational knowledge at receptive and productive levels can be given to the same participants so as to have a better idea about their collocational knowledge at both levels. For example, in order to test the receptive knowledge of the learners, an online study (e.g. a reaction time study) can be designed for better results. Furthermore, the present study includes only 4 collocation types out of the 33 collocation types described by Benson et al (2010). Studies including other types of collocations can be carried out to have a

more comprehensive picture of the collocational knowledge of Turkish learners in other collocation types.

Only two proficiency levels are included in this study. In order to shed light on the developmental pattern of collocation acquisition of Turkish EFL learners, future studies can include different proficiency levels. Although we assume that the participants know the words that constitute the collocations tested in the study, since these words were taken from frequency lists and were asked to 5 PIN level learners for validity concerns, the overall previous collocational knowledge of the participants is not known. Lastly, the current study does not focus on the errors of the participants. At productive level, it can be worth studying the collocational mistakes of the Turkish EFL learners in order to have an idea about the reasons behind their mistakes.

6.4. Pedagogical implications

In the present study, the ADV group performed well in both the acceptability judgment and the gap filling tests. However, this was not the case for the PIN group. Although they supposedly knew all the words in both tests, they failed to come up with their collocations. The institution where the participants study prepares an active vocabulary list twice in an educational term and includes the collocations of the words in it and provides it to the teachers and the students. The students are responsible for all these words with their collocations in the tests. However, while teaching these words in the active vocabulary list during the lessons, how much importance is given to their collocations by the teachers is not certain. This may be one of the reasons why PIN group had a poor performance in general in both tests. Therefore, it is important to include collocations more in classes and teach them explicitly (Keshavarz & Salimi, 2007) while teaching vocabulary in class. Teachers need to look at collocations as an inseparable part of the words. When teaching a

vocabulary item, teachers need to provide students with its collocations all the time. Otherwise, it is difficult for the students to acquire the collocations of the words that they have already learnt. In addition, when they do not know the collocations of the words, learners are not able to use these words at productive level correctly.

Besides, collocational knowledge of both groups at receptive level is better than their collocational knowledge at productive level. Keeping this in mind, it is essential to give the learners the opportunity to use collocations more and in a correct way at productive level by including more speaking and writing activities during the lessons. By giving immediate or delayed feedback to their performances in these activities, teachers need to encourage students to use collocations correctly.

Another point to keep in mind is the fact that learners learn new vocabulary items not only in the classroom but also outside the classroom. Thus, it is essential to raise awareness among learners to learn the words that collocate while learning a new vocabulary item in order to be able to use these words at productive level. The first step to do this is to teach students what it really means to know a word and how they should learn a new vocabulary item.

The fact that at both receptive and productive levels the ADV group had higher scores on lexical collocations than on grammatical collocations (which include a preposition) may be attributed to the fact that the mother tongue of the participants, Turkish, does not have prepositions. Thus, EFL instructors need to keep this in mind and focus on grammatical collocations more while teaching new words. Teachers can draw students' attention more to prepositions in them. Students' native tongues may also affect their choice of words in the target language and they may also produce wrong collocations because of this. Therefore, when teachers present a new collocation, either lexical or grammatical, they need to make sure that students are exposed to this collocation as many times as possible.

That both groups performed best in verb-noun collocations shows us that other collocation types should also be given adequate attention during the lessons. Learners need to be encouraged to learn and use the newly acquired vocabulary items with the other vocabulary items with which they collocate. They should also be motivated to use monolingual dictionaries where the collocations of the words are provided.

Lastly, based on the feedback from the teachers of the participants who have seen the tests of the study, it can be suggested that more tests related to collocations can be devised by testers. More than one collocation type can be included in these tests. Especially designing tests consisting of frequent collocations can be beneficial because when students take these tests, they realize that although they know the words in the sentences, they cannot come up with their collocations. This helps them understand the importance of collocations and motivates the students to learn collocations more. However, testing is not the only way to achieve these purposes. Teachers can make use of technology or other interactive activities to encourage students to use collocations correctly.

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APPENDICES

APPENDIX A

MINI SURVEY TO CHOOSE COLLOCATION TYPES TO BE INCLUDED IN THE STUDY

1. Please choose the grammatical collocation types that higher level Turkish learners of English learn more easily.

Lower level learners	Higher level learners
	Lower level learners

2. Please choose the lexical collocation types that higher level Turkish learners of English learn more easily.

	Lower level learners	Higher level learners
1) verb+noun (example: compose		
music, take responsibility)		
2) adjective+noun (example:		
warmest regards, crucial role)		
3) verb+adverb (example: affect		
deeply, criticize severely)		
4) noun+verb (example: blood		
circulates, dog barks)		
5) noun+noun (example: an act of		
violence, a bar of soap)		
6) adverb+adjective (example:		
strictly accurate, fully aware)		

APPENDIX B THE ACCEPTABILITY JUDGMENT TEST

		her the underlined words can be used together or not. Write "C" for the and "I" for the incorrect one.
Examp	oles:	This year is a good time to invest in the property market. C
	<u> </u>	There is no point on doing thisI
		I forgot to do my homework. C
		Don't <u>open your phone</u> hereI
2)	I can <u>ı</u>	make advice and if an emergency occurs, I will also help
3)	I am t	he youngest <u>member of</u> the new youth team at Dehon House
4)	Ok, I 1	think I will <u>put</u> the <u>risk</u> and call him
5)	My sis	ster and I usually have a <u>helpful time</u> together
6)	We al	ways want our teachers to be useful people.
7)	Last J	uly, Mike <u>made</u> the <u>mistake</u> of going to work on the day of the strike.
8)	This b	oook describes ten ways to <u>take advantage</u> of the benefits of the web.
9)		ook also provides <u>clean information</u> about the people who live in the

10) By using the last technology , they developed a method to produce it all at
once
11) The weather was terrible, so many people got strict colds.
12) You must be feeling lonely after the loss of your husband
13) German is the original tongue of over 100 million people who live in
different countries
14) I'm very <u>careful towards</u> washing my hands before eating.
15) If you have difficulty with the exercise, you can ask your teacher for some
help
16) Everybody knows that Jack is bad with swimming.
17) How women see things is generally different at how men see things
18) The <u>heavy traffic</u> in the city center made me late for my meeting.
19) It becomes <u>necessary with</u> professionals to know about finance, management
and marketing.
20) He was very successful in attracting attention to his project.
21) As they are poor on quality, nobody wants to use them
22) I can see that he is really serious about it.
23) Red meat is known to be <u>rich on</u> protein
24) There is a need about better healthcare here but unfortunately nobody seems
to care
25) Dr. Benton claims that having a good breakfast is especially important for
the elderly
26) There is no problem through parking. There is a large car park outside the
mall
27) She understood that her experience about advertising and selling was an
advantage
28) Is she having second thoughts about coming to Brighton with us?
29) The <u>decrease at</u> the number of sponsors affected the organization negatively.

30) He did not believe that this announcement would have great influence
towards Parliament
31) Do you think it will do a difference if they do not come tonight?
32) Eating soup at the start of a meal fills the stomach.
33) During the earthquake, I told the boys not to do panic .
34) That is enough! We must <u>put</u> an <u>end</u> to their threats
35) The <u>reason for</u> the attack was very simple
36) Surprisingly, her students had an interest about this issue.
37) Scientists can also <u>play</u> a <u>role</u> in improving energy efficiency in their
laboratories
38) His father has always been a stressful person.
39) Firefighters sprayed water onto the roof of the house so that it wouldn't $\underline{\mathbf{catch}}$
<u>fire</u>
40) This is the <u>last chance</u> to submit your final project
41) Eating <u>fresh fruit</u> is an important part of a balanced diet
42) We won't gain money if we don't start selling something soon
43) Coca Cola mainly produces soft drinks including fruit juice
44) If you take a short cut , we can be there on time.
45) We are not sure if this has a beneficial effect on our economic
performance
46) "Respect for others" should be the first principle of our training courses.
47) Hurry up! You mustn't be <u>late for</u> school
48) You'll probably get <u>tired on</u> waiting for them after a while
49) When they arrived, they were awfully sorry about the delay
50) There were no meetings that were open to the public
51) Think carefully about your <u>attitude through</u> her and her parents
52) Anne's mother was free from pain but almost too weak to move
53) This information system provides an effective solution to our company's
problems

54) This <u>research on</u> family relationships is based on clinical samples of families
with problems
55) He couldn't <u>say</u> a <u>lie</u> to save his life
56) The city center is home to several excellent restaurants.

APPENDIX C THE GAP FILLING TEST

PART 1

Please fill in the blanks with a <u>verb</u> that best completes each sentence. Use the first letter as a clue.

Exampl	e: We need to f_ix a time for the meeting. It is still not certain.
1) (One of the firm's managers complained: 'We shouldn't d
	business with a new company. We do not need a new partnership.'
2) I	think we need to spend more time in the city centre to h a look
	around and try the local food which is really famous.
3) V	We are all taught from a very early age that if we are going to get anywhere
	in this life, we have to m an effort.
4) I	Last year, Paul began to remember his dreams. Then he bought a nice
	notebook and started to k a diary of those dreams.
5) I	Helen, who was pregnant with her second child, drove herself to the hospital
	to g birth to her daughter.
6) I	Before the school started, the mother trained her children to h
	hands, walk straight to school and not to talk to strangers on their way.
7) \$	Some people can s a language, but this does not mean that they
	know how to write its alphabet.
8) V	When her son was old enough to leave home, Jennifer finally started to
	l a life of her own without taking care of any other people.
9) 7	The expert thought he could r the business better than the
	businessman because he had worked for this company for more than 30
	years.

10) Once a s	tudent leaves his/her famil	y to study abroad	d, it will t
time for	him/her to get used to the	new life in that n	ew country.
11) While w	e were sitting in the café or	f the music hall,	Arthur started to
t	a story about the tim	ne when he perfo	rmed in the biggest
music ha	all in Europe.		
12) When yo	ou read the whole plan, plea	ase p	_ attention to the details
about pri	ices. We still have doubts a	about them.	
PART 2			
Please fill in the	blanks with an <u>adjective</u> th	hat best complete	es each sentence. Use the
first letter as a cl	ue.		
Example: Looki	ing at its powerful engine,	, everybody can	see that this Ferrari is a
very f_ast_	car.		
13) Don't yo	ou have a c frie	end who could sp	end some time just
talking w	vith you, or who can look a	ıfter your kids fo	or the weekend to give
you a bre	eak?		
14) Because	e more and more people are	e consuming fast	food nowadays, there is
S	competition among d	ifferent fast food	d companies.
15) For their	· ljourney to the	ne North Pole, th	ey needed a lot of food.
However	r, it was not possible for th	em to carry it all	for all those days.
16) The ice of	on the road and p	visibility cau	sed a lot of traffic
accidents	s all over the country durin	g this winter.	
17) Don't dr	ink that coffee because it h	as probably lost	its aroma, but if you
want, I	can make some f	coffee for you	u.
18) Some sna	akes in Africa can shoot th	eir venom, poisc	onous liquid, at an enemy
from a di	istance of 6 feet, and cause	eye damage and	l s pain.

19) Internet has become an important part of our d	life. It seems we
cannot survive without it for more than 24 hours because	se we use it all the
time everywhere.	
20) In this study, researchers studied the role of "experience	e" in dancing with
two groups, but found no s difference betw	veen the experienced
and inexperienced groups.	
21) There was such h rain that nobody could go	o out. Everybody in
the party waited indoors for the rain to stop.	
22) Teachers should give g importance to the d	lifferent learning
styles of the students. If not, students cannot realize the	ir own potential.
23) It is true that there are some similarities between the tw	o plans, but if you do
a more d analysis, you can see there are ma	any differences as
well.	
24) As a g rule, vegetable oils are better for our	r health than animal
fats, so we should include vegetable oils more in our di-	et.
PART 3	
<u> </u>	
Please fill in the blanks with a preposition that best completes of	each sentence.
Example: She was accused <u>of</u> spreading lies about her	boss.
25) I'm satisfied with the performance of the tyres of my ca	ar. However, if you
think they will be bad my Land Rover after son	ne time, I can change
them.	
26) This short feedback form is supposed to make it easy for	or you to comment
our products, service and staff.	
27) Aside from that, my admiration him as a person	n is perhaps as great
as my fear of him.	

28) It is important all 2,500 football clubs in this country to have junior
development courses to be able to attract more young people.
29) Many popular carbonated drinks are not only high caffeine, but mos
of them also contain coloring and artificial preservatives.
30) Nowadays, there is a growing demand organic dairy, meat and egg
products. Therefore, many companies have started to go into this business.
31) The only way to be good this job is to put everything you've got into
it; otherwise, you cannot be successful.
32) Their brother was a bad man who had lived an evil life that was full
hate and jealousy.
33) As you can see from these two pictures, last season's menu looks very
similar the new one that we have recently prepared.
34) The committee says the large area behind the buildings does not have any
use the site; therefore, it will now be open to private development.
35) The documentation for these programs provides an impressive history
the subject that many people do not know about.
36) Vitamin D is essentialstrong bones and teeth. Therefore,
mothers should include more vitamin D in their children's diet.
37) If we knew the answer this question, we would be able to
understand the theory better and work on it for further development.
38) If you want to apply for this position, you should have at least 5 years of
experience and a degree economics.
39) Police officers think that the same two men are responsible two
similar attacks in Buckinghamshire on Bonfire night.
40) At the start of a project, there is often a lot of pressure
managers to find qualified people to work for the project.
41) When they come to our store, customers can benefit expert
advice that our staff give. Moreover, we offer a super selection of plants and
high-quality furniture.

42) The band could build a	strong relationship _	the audiences in the
concerts both in their or	wn country and abroa	ad.
43) If you are not sure	the pronunciation	n because you have not heard the
word or phrase used, ch	neck the pronunciation	on with friends.
44) It is easy for anyone to	see the change	his style. He has a
completely new look no	ow.	
45) With this national comp	outer system that has	been improved lately, the police
force will be more effect	ctive ca	tching criminals.
46) You can believe it or no	ot, but there is a posi-	tive and negative side
everything in this life.		
47) When I shared the good	l news with him, he	said he was happy
me and I could definite	ly see it from his eye	es.
48) She was aware	the health risks	of smoking, but this did not stop
her and she continued t	o smoke.	

APPENDIX D CONSENT FORM

Gönüllü Katılım formu

Bu araştırma, Orta Doğu Teknik Üniversitesi Temel İngilizce Bölümü öğretim elemanı Nazife Duygu Bağcı tarafından yapılmaktadır. Araştırma, İngilizce öğrenen Türk öğrencilerin eşdizim bilgisini ölçmek ve farklı seviyeler arasında eşdizim bilgileri bakımından fark olup olmadığına bakmaktır. Araştırmanın tüm evrelerinde toplanan bilgiler sadece bu araştırma için kullanılacak ve kesinlikle gizli tutulacaktır.

Katılım tamamen gönüllüdür. Testte katılımcıları rahatsız edecek hiçbir soru bulunmamaktadır. Ortalama 15 dakika sürecektir. Araştırmanın herhangi bir evresinde katılımcı olmaktan vazgeçmek isterseniz, araştırmacıyı bilgilendirmeniz yeterlidir. Araştırmanın ikinci evresinde ortalama 20 dakika sürecek eşdizimlilikle ilgili ikinci bir test uygulanacaktır.

Araştırmayla ilgili oluşabilecek sorularla ilgili iletişim bilgileri:
Nazife Duygu Bağcı (dbagci@metu.edu.tr)
ODTÜ, Temel İngilizce Bölümü
0312 210 39 63
Çalışmaya gönüllü olarak katılmayı kabul ediyorum.
Katılımcının Adı-Soyadı:
İmza:
Tarih:

APPENDIX E
RELIABILITY SCORES OF THE ACCEPTABILITY JUDGMENT TEST

						Scale		Correct	
		Scale		Cronba		Mean	Scale	ed	Cronba
	Scale	Varianc	Corrected	ch's		if	Varianc	Item-	ch's
	Mean if	e if	Item-Total	Alpha		Item	e if	Total	Alpha
	Item	Item	Correlatio	if Item		Delet	Item	Correla	if Item
1	Deleted	Deleted	n 217	Deleted	-:20	ed 26.15	Deleted	tion	Deleted
r1	36,24	51,675	,317	,803	r29	36,15	53,888	,013	,812
r2	35,91	53,246	,149	,808,	r30	36,38	51,643	,340	,803
r3	35,74	54,227	0,000	,809	r31	35,90	52,452	,305	,804
r4	35,90	52,810	,237	,806	r32	36,12	53,419	,079	,810
r5	35,96	52,282	,293	,804	r33	36,12	50,762	,462	,799
r6	36,18	54,804	-,112	,816	r34	36,16	50,197	,536	,797
r 7	35,82	53,312	,200	,807	r35	35,91	52,888	,213	,806
r8	36,09	51,007	,435	,800	r36	36,06	51,996	,296	,804
r9	36,12	52,643	,189	,807	r37	35,94	53,638	,071	,810
r10	36,12	50,105	,560	,796	r38	36,56	52,519	,280	,805
r11	36,15	51,500	,349	,802	r39	36,10	52,333	,236	,806
r12	36,01	50,522	,545	,797	r40	35,84	52,944	,267	,805
r13	36,04	51,028	,449	,800	r41	35,81	54,306	-,038	,810
r14	36,21	51,927	,283	,804	r42	36,15	51,411	,362	,802
r15	36,00	50,716	,523	,798	r43	35,93	52,995	,187	,807
r16	35,88	52,523	,305	,804	r44	36,29	51,255	,380	,802
r17	35,93	51,860	,387	,802	r45	35,97	54,924	-,139	,815
r18	36,32	53,655	,045	,811	r46	36,06	56,414	-,340	,821
r19	36,04	51,655	,352	,803	r47	36,03	51,223	,425	,801
r20	36,19	58,038	-,531	,827	r48	36,12	50,732	,467	,799
r21	36,29	52,211	,244	,805	r49	35,97	54,686	-,101	,814
r22	35,84	52,466	,376	,803	r50	36,12	50,881	,445	,800
r23	36,21	53,808	,023	,812	r51	36,25	51,414	,355	,802
r24	36,10	51,168	,406	,801	r52	36,34	53,123	,120	,809

r25	35,79	53,330	,243	,806	r53	36,07	54,159	-,023	,813
r26	36,15	50,993	,422	,800	r54	35,88	54,673	-,108	,813
r27	36,34	52,914	,149	,808,	r55	36,09	50,500	,511	,798
r28	36,19	51,381	,361	,802	r56	36,38	50,270	,546	,797

APPENDIX F
RELIABILITY SCORES FOR THE GAP FILLING TEST

Scale Scale ded Item- Mean if Variance Item Deleted De	Correlatio n 7 ,440	Cronbach' s Alpha if Item Deleted
Mean if ItemVariance if ItemTotal CorrelatAlpha if Itemif Item DeleteVariance ItemDeletedDeletedItem ionDeletedDeleted	Total Correlatio n 7 ,440	s Alpha if Item
Itemif ItemCorrelatItemDeleteif ItemDeletedDeletedionDeleteddDeleted	Correlatio n 7 ,440	Item
Deleted Deleted ion Deleted d Deleted	n 7 ,440	
	,440	Defeted
1 DL1	· ·	,924
	- 200	· ·
pr2 28,82 106,864 ,627 ,922 pr28 28,97 108,833	,398	,925
pr3 28,69 109,411 ,433 ,924 pr29 29,25 110,519	,286	,925
pr4 28,79 108,285 ,492 ,924 pr30 28,75 110,666	,257	,926
pr5 28,82 106,983 ,614 ,923 pr31 29,18 113,700	-,065	,928
pr6 28,96 106,103 ,667 ,922 pr32 29,31 110,575	,315	,925
pr7 28,50 112,821 ,168 ,926 pr33 28,79 109,24	,392	,925
pr8 28,79 107,181 ,609 ,923 pr34 28,75 108,10	,538	,923
pr9 28,69 109,978 ,366 ,925 pr35 28,72 110,89	,244	,926
pr10 28,99 106,970 ,580 ,923 pr36 29,32 112,909	,028	,927
pr11 28,75 109,146 ,423 ,924 pr37 28,82 110,655	,238	,926
pr12 28,69 109,023 ,480 ,924 pr38 28,76 109,013	,429	,924
pr13 28,53 111,865 ,311 ,925 pr39 28,91 108,825	,403	,924
pr14 28,96 105,804 ,697 ,922 pr40 28,78 112,264	,082	,927
pr15 29,21 108,644 ,469 ,924 pr41 28,79 108,464	,473	,924
pr16 28,71 109,076 ,460 ,924 pr42 29,29 112,15	,114	,926
pr17 29,01 108,791 ,403 ,924 pr43 28,79 108,403	,479	,924
pr18 29,07 107,233 ,564 ,923 pr44 28,96 105,744	,703	,922
pr19 29,26 109,392 ,424 ,924 pr45 28,82 108,029	,506	,924
pr20 28,66 110,018 ,385 ,925 pr46 28,90 109,586	,331	,925
pr21 29,35 109,844 ,462 ,924 pr47 28,94 105,81°	,697	,922
pr22 28,85 107,829 ,516 ,923 pr48 29,09 107,156	,575	,923
pr23 29,01 106,910 ,587 ,923	•	
pr24 29,03 105,104 ,769 ,921		
pr25 29,25 110,310 ,309 ,925		
pr26 28,74 109,272 ,417 ,924		

APPENDIX G DESCRIPTIVE STATISTICS TABLES

Table Descriptive Statistics of Groups

					Std.
				Std.	Error
Group		N	Mean	Deviation	Mean
Productive	PIN	34	38,86	9,734	1,669
	ADV	34	72,74	10,801	1,852
Receptive	PIN	34	54,31	5,475	,939
	ADV	34	76,89	7,639	1,310

Descriptive Statistics of Sub Groups

					Std.
				Std.	Error
Group		N	Mean	Deviation	Mean
Lexical	PIN	34	52,94	8,176	1,402
Collocations	ADV	34	79,83	8,474	1,453
at Receptive					
Level					
Preposition	PIN	34	55,67	8,620	1,478
Rec	ADV	34	73,95	10,607	1,819
Noun Pr	PIN	34	40,61	13,563	2,326
	ADV	34	80,43	12,646	2,169
Preposition	PIN	34	37,22	12,115	2,078
Pr	ADV	34	67,31	12,570	2,156

Descriptive Statistics of Sub-sub Groups

					Std.
				Std.	Error
Group		N	Mean	Deviation	Mean
Adjective-Noun Rec	PIN	34	52,10	11,995	2,057
	ADV	34	73,95	11,105	1,904
Verb-Noun Rec	PIN	34	53,78	10,873	1,865
	ADV	34	85,71	12,183	2,089
Noun-Preposition	PIN	34	53,99	11,690	2,005
Rec	ADV	34	71,85	14,494	2,486
Adjective-	PIN	34	57,35	11,189	1,919
Preposition Rec	ADV	34	76,05	9,772	1,676
Adjective-Noun Pr	PIN	34	55,20	18,696	3,206
	ADV	34	91,63	12,032	2,063
Verb-Noun Pr	PIN	34	26,02	13,526	2,320
	ADV	34	69,23	17,965	3,081
Noun-Preposition	PIN	34	28,05	14,029	2,406
Pr	ADV	34	61,31	16,234	2,784
Adjective-	PIN	34	46,38	16,562	2,840
Preposition Pr	ADV	34	73,30	12,012	2,060

(rec: receptive level, pr: productive level)

APPENDIX H RESULTS OF THE INDEPENDENT SAMPLES T-TEST

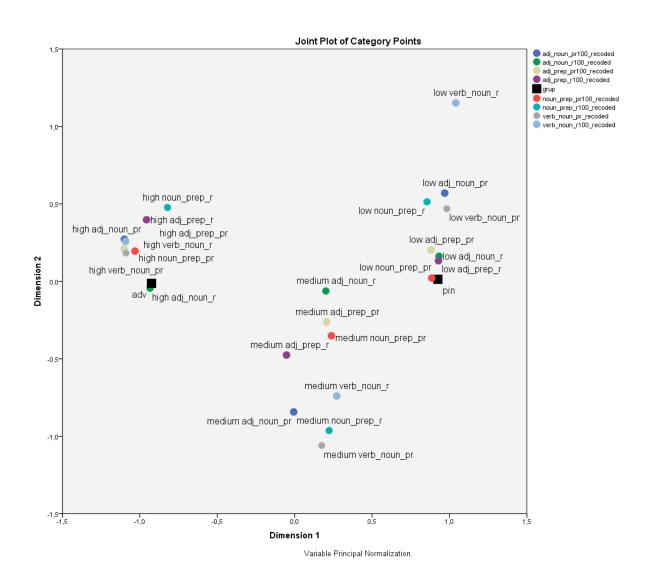
Independent Samples Test- Comparison of PIN and ADV overall performance at both levels

		Tes Equ	ene's st for nality of iance s		t-	test for	Equality o	of Mean	18	
						Sig. (2-	Mean	Std. Err or Diff	95 Confi Interva Diffe	dence l of the
		F	Sig.	t	df	taile d)	Differe nce	eren ce	Lowe r	Uppe r
producti ve level receptive level	Equal variances assumed Equal variances not assumed Equal variances assumed	.0 81	.77 7	13.58 7 13.58 7 14.01 2	66 65.30 0	.000	-33.880 -33.880 -22.584	2.49 4 2.49 4 1.61 2	38.85 9 - 38.86 0 - 25.80 2	28.90 1 - 28.90 0
	Equal variances not assumed			14.01 2	59.82 6	.000	-22.584	1.61	25.80 8	19.36 0

Independent Samples Test- Comparison of both groups in sub-sub factors

		Leve	ene's					
		Tes	t for					
			lity of					
		Varia	ances	t-test for Equality of Means				ıs
						Sig.		Std.
						(2-	Mean	Error
		-	a.		1.0	taile	Differe	Differe
		F	Sig.	t	df	d)	nce	nce
adj_noun_r100	Equal variances assumed	.094	.760	-7.794	66	.000	-21.849	2.803
	Equal variances not assumed			-7.794	65.6 12	.000	-21.849	2.803
verb_noun_r100	Equal variances assumed	.174	.678	-11.403	66	.000	-31.933	2.800
	Equal variances not assumed			-11.403	65.1 64	.000	-31.933	2.800
noun_prep_r100	Equal variances assumed	.923	.340	-5.592	66	.000	-17.857	3.193
	Equal variances not assumed			-5.592	63.1 66	.000	-17.857	3.193
adj_prep_r100	Equal variances assumed	.234	.630	-7.339	66	.000	-18.697	2.548
	Equal variances not assumed			-7.339	64.8 26	.000	-18.697	2.548
verb_noun_pr10	Equal variances assumed	10.9 20	.002	-9.553	66	.000	-36.425	3.813
	Equal variances not assumed			-9.553	56.3 32	.000	-36.425	3.813
adj_noun_pr100	Equal variances assumed	2.40	.126	-11.205	66	.000	-43.213	3.857
	Equal variances not assumed			-11.205	61.3 14	.000	-43.213	3.857
noun_prep_pr10	Equal variances assumed	.105	.747	-9.038	66	.000	-33.258	3.680
	Equal variances not assumed			-9.038	64.6 42	.000	-33.258	3.680
adj_prep_pr100	Equal variances assumed	3.12	.082	-7.673	66	.000	-26.923	3.509
	Equal variances not assumed			-7.673	60.1 94	.000	-26.923	3.509

APPENDIX I CORRESPONDENCE ANALYSIS RESULTS



APPENDIX J CORRELATION TABLES

Correlations ^a							
		prod100	receptive100				
prod100	Pearson	1	113				
	Correlation						
	Sig. (2-tailed)		.525				
	N	34	34				
receptive100	Pearson	113	1				
	Correlation						
	Sig. (2-tailed)	.525					
	N	34	34				

a. grup = pin

Correlations ^a						
		prod100	receptive100			
prod100	Pearson	1	,571**			
	Correlation					
	Sig. (2-tailed)		.000			
	N	34	34			
receptive100	Pearson	,571**	1			
	Correlation					
	Sig. (2-tailed)	.000				
	N	34	34			

^{**.} Correlation is significant at the 0.01 level (2-tailed).

a. grup = adv

APPENDIX K ANOVA RESULTS FOR PIN GROUP SUB-SUB FACTOR – RECEPTIVE LEVEL

ANOVA ^a							
anova							
	Sum of						
	Squares	df	Mean Square	F	Sig.		
Between Groups	493.697	3	164.566	1.256	.292		
Within Groups	17289.916	132	130.984				
Total	17783.613	135					

a. grup = pin

ANOVA RESULTS FOR PIN GROUP SUB-SUB FACTOR – PRODUCTIVE LEVEL

ANOVA ^a						
anova						
			Mean			
	Sum of Squares	df	Square	F	Sig.	
Between Groups	20581.274	3	6860.42	27.3	.000	
	20301.274	3	5	43	.000	
Within Groups	33118.691	132	250.899			
Total	53699.965	135				

a. grup = pin

TUKEY TEST RESULTS FOR PIN GROUP SUB-SUB FACTOR-PRODUCTIVE LEVEL

Multiple Comparisons ^a						
Dependent Variable: Tukey HSD	anova					
					95% Co	onfidence
		Mean			Inte	erval
		Difference	Std.		Lower	Upper
(I) group		(I-J)	Error	Sig.	Bound	Bound
adj_noun	verb_noun	-29.186*	3.842	.000	-39.18	-19.19
	noun_prep	-2.036	3.842	.952	-12.03	7.96
	adj_prep	-20.362*	3.842	.000	-30.36	-10.37
verb_noun	adj_noun	29.186 [*]	3.842	.000	19.19	39.18
	noun_prep	27.149 [*]	3.842	.000	17.15	37.15
	adj_prep	8.824	3.842	.104	-1.17	18.82
noun_prep	adj_noun	2.036	3.842	.952	-7.96	12.03
	verb_noun	-27.149 [*]	3.842	.000	-37.15	-17.15
	adj_prep	-18.326*	3.842	.000	-28.32	-8.33
adj_prep	adj_noun	20.362*	3.842	.000	10.37	30.36
	verb_noun	-8.824	3.842	.104	-18.82	1.17
	noun_prep	18.326 [*]	3.842	.000	8.33	28.32

^{*.} The mean difference is significant at the 0.05 level.

a. grup = pin

APPENDIX L

ANOVA RESULTS FOR ADV GROUP SUB-SUB FACTOR – RECEPTIVE LEVEL

ANOVA ^a						
anova						
	Sum of		Mean			
	Squares	df	Square	F	Sig.	
Between Groups	3829.532	3	1276.511	8.844	.000	
Within Groups	19051.621	132	144.330			
Total	22881.152	135				

a. grup = adv

TUKEY TEST RESULTS FOR ADV GROUP SUB-SUB FACTOR-RECEPTIVE LEVEL

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Dependent

Variable: anova

Tukey HSD

		Mean			95% Con Inter	
(I) groups		Differen ce (I-J)	Std. Error	Sig.	Lower Bound	Upper Bound
adj_noun	verb_noun	-11.765 [*]	2.914	.001	-19.35	-4.18
	noun_prep	2.101	2.914	.889	-5.48	9.68
	adj_prep	-2.101	2.914	.889	-9.68	5.48
verb_noun	adj_noun	11.765*	2.914	.001	4.18	19.35
	noun_prep	13.866*	2.914	.000	6.28	21.45
	adj_prep	9.664*	2.914	.006	2.08	17.25
noun_prep	adj_noun	-2.101	2.914	.889	-9.68	5.48
	verb_noun	-13.866*	2.914	.000	-21.45	-6.28
	adj_prep	-4.202	2.914	.476	-11.78	3.38
adj_prep	adj_noun	2.101	2.914	.889	-5.48	9.68
	verb_noun	-9.664 [*]	2.914	.006	-17.25	-2.08
	noun_prep	4.202	2.914	.476	-3.38	11.78

^{*.} The mean difference is significant at the 0.05 level.

a. grup = adv

APPENDIX M

ANOVA RESULTS FOR ADV GROUP SUB-SUB FACTOR – PRODUCTIVE LEVEL

ANOVA ^a							
anova							
			Mean				
	Sum of Squares	df	Square	F	Sig.		
Between Groups	16827.358	3	5609.119	25.632	.000		
Within Groups	28886.182	132	218.835				
Total	45713.540	135					

a. grup = adv

TUKEY TEST RESULTS FOR ADV GROUP SUB-SUB FACTOR-PRODUCTIVE LEVEL

Multiple Comparisons ^a						
Dependent						
Variable:	anova					
Tukey HSD						
					95% (Confidence
		Mean			In	terval
		Difference			Lower	Upper
(I) group		(I-J)	Std. Error	Sig.	Bound	Bound
adj_noun	verb_noun	-22.398*	3.588	.000	-31.73	-13.06
	noun_prep	7.919	3.588	.127	-1.42	17.25
	adj_prep	-4.072	3.588	.669	-13.41	5.26
verb_noun	adj_noun	22.398*	3.588	.000	13.06	31.73
	noun_prep	30.317*	3.588	.000	20.98	39.65
	adj_prep	18.326*	3.588	.000	8.99	27.66
noun_prep	adj_noun	-7.919	3.588	.127	-17.25	1.42
	verb_noun	-30.317*	3.588	.000	-39.65	-20.98
	adj_prep	-11.991*	3.588	.006	-21.33	-2.66
adj_prep	adj_noun	4.072	3.588	.669	-5.26	13.41
	verb_noun	-18.326*	3.588	.000	-27.66	-8.99
	noun_prep	11.991*	3.588	.006	2.66	21.33

^{*.} The mean difference is significant at the 0.05 level.

a. grup = adv

APPENDIX N

BBI DICTIONARY CLASSIFICATION OF COLLOCATIONS

Lexical Collocations

- L1- verb+ noun/ pronoun "make an agreement"
- L2- verb+ noun "reject an appeal"
- L3- adj+ noun "strong tea"
- L4- noun+ verb "blizzards rage"
- L5- noun of noun "an act of violence"
- L6-adverb+adjective "strictly accurate"
- L7- verb+ adverb "affect deeply"

Grammatical Collocations

- G1- noun+ preposition "blockade against"
- G2- noun+ to-infinitive clause "a pleasure to do it"
- G3- noun+ that clause "we reached an agreement that she would represent us in court"
- G4- preposition+ noun "by accident"
- G5- adjective+ preposition "afraid of him"
- G6- adjective+ to infinitive clause "she is ready to go"
- G7- adjective+ that clause "she was afraid that she would fail the exam"
- G8- (This category consists of 19 English verb patterns ordered below)

A *verbs (trans) that allow dative movement transformation* "he sent the book to his brother" OK "he sent his brother the book"

B verbs (trans) that do not allow dative Movement "they described the book to her"

C verbs (trans) used with 'for' that allow dative movement transformation "she bought a shirt for her husband" OK "she bought her husband a shirt"

D verbs + prep "act as"; "adhere to the plan"

E verb + to-inf "they began to speak"; "he decided to come"

F verb + inf without 'to' "we must work"; "he had better go"

G verb + v-ing "they enjoy watching TV"

H verb (trans) + obj + to-inf "she asked me to come"; "we forced them to live"

I verb (trans) + obj +inf without 'to' "she heard them leave"; "we let the children go to the park"

J verb (trans) + object + v-ing "I caught them stealing apple"

K *verb (trans)* + *poss* + *gerund* "please excuse my waking you so early"; "this fact justifies Bob's coming late"

L verb (trans) + that- noun clause "they admitted that they were wrong"

M verb (trans) + obj + inf 'to be' + complement (adj/past part/noun/pronoun) "we consider her to be well trained"

N verb (trans) + obj + complement (adj/past part/noun/pronoun) "she dyed her hair red"

O *verb (trans)*+ *obj* + *obj* "the teacher asked the boy a question"; "the police fined him fifty dollars"

P verb + adverbial "he carried himself well"; "the meeting will last two hours"

Q verb + wh-word "he asked how to do it"; "we told them what to do"

R $subj\ (it) + verb + to-inf\ or\ that\ clause\ "it\ puzzled\ me\ that\ they\ never\ answered\ the$ telephone"

S verb (intrans) + complement (noun or adj) "she became an engineer"; "she was enthusiastic"

s verb (intrans) + pred adj "she looks fine"; "the flowers smell nice"

APPENDIX O

TÜRKÇE ÖZET

İNGİLİZCE'Yİ 2. DİL OLARAK ÖĞRENEN TÜRK ÜNİVERSİTE DÜZEYİ ÖĞRENCİLERİNİN ALGILAMA VE ÜRETME SEVİYESİNDEKİ EŞDİZİM BİLGİSİ

1. GİRİŞ

Yabancı dil öğrenen kimseler için kelime dağarcıklarının zengin olmasının önemi, yabancı dil öğrenme sürecinde yer alan herkes için yadsınamaz bir gerçektir (Schmitt, 2010). Ayrıca Schmitt (2010) kelime öğretiminin genellikle tek tek kelimelerin öğretilmesi olarak gerçekleştiğini; halbuki bir çok araştırmacının da belirttiği gibi (Nattinger & DeCarrico, 1992; Wray, 2002; Fellbaum, 2007) formülsel dilin (formulaic language) kelime öğretiminde göz ardı edilmemesi gerektiğini vurgular. Dillerde birçok sayıda eşdizim bulunması nedeniyle, eşdizim konusu üzerinde çalışmalar yapılmasına değer bir konudur (McCarthy, 1990). İki temel eşdizim çeşidi vardır; dilbilgisel (grammatical) ve anlamsal (lexical). Dilbilgisel eşdizimler, içerikli sözcüklerin yanında bir adet edatın yer alması ile oluşur. Anlamsal eşdizimler ise yalnızca içerikli sözcüklerin birleşmesiyle oluşur.

Hangi kelimelerin hangi kelimelerle eşdizim oluşturduklarını bilmek, anadil konuşurunun iletişim yetisinin bir parçasıdır. Bir çok araştırmacı (Sinclair, 1991; Wray, 2002; Li & Schmitt, 2009) tarafından artık kabul edilen bir gerçek ise anadil konuşurunun sahip olduğu gibi bir eşdizim bilgisine sahip olmak ustaca dil kullanımının önemli bir unsurudur. Anadil konuşurları için eşdizim bilgisi dilbilgilerinin bir parçası iken, yabancı dil öğrenenler için problem yaratacak bir konu haline dönüşebilir. Özellikle kültürlere has olan ve yalnızca evrensel

anlambilim kısıtlamaları dahilinde oluşmayan eşdizimler, ileri seviyede o yabancı dili konuşan kişiler için bile zor öğrenilebilir (McCarthy, 1990).

Gözlemlediğim kadarıyla, alanda şu ana kadar İngilizce öğrenen Türklerin eşdizim bilgilerini ölçen bir çalışma yapılmamıştır. Uluslararası alanda ise eşdizim bilgisi ile ilgili yapılan çalışmalar genelde yalnızca ileri seviye grupları ile yapılmıştır (Shehata, 2008; Li & Schmitt, 2009; Yamashita & Jiang; Alsakran, 2011; Sonbul &Schmitt, 2013). Çok az çalışma ileri seviyede grupların yanında başka seviyede o dili öğrenen öğrencilerle eşdizim bilgilerine yönelik çalışmalar yapmıştır (Gitsaki, 1996; Bonk, 2000). Alanda, anlama ve üretme seviyesinde eşdizim bilgisini ölçen, güvenilirliği ve geçerliliği kanıtlanmış çok az test tasarlanmıştır. Bu çalışmada hazırlanan iki testin alandaki bu boşluğu doldurması hedeflenmektedir. Ayrıca 4 farklı eşdizim türünü (fiil-isim, sıfat-isim, isim-edat, sıfat-edat) tek çalışmada birleştirmesi ile de mevcut çalışma, alandaki diğer çalışmalardan ayrılmaktadır.

2. LİTERATÜR ÖZETİ

Bu başlık altında mevcut çalışmaya benzer çalışmalar kısaca özetlenecektir.

Gitsaki (1996): Bu çalışma eşdizim konusunda yapılan en kapsamlı çalışmalardan biri olarak görülmektedir. Çalışmada 275 İngilizce öğrenen Yunan öğrenci katılımcı olarak yer almıştır. Paragraf yazma, çeviri ve boşluk doldurma testleri kullanılmıştır. Sonuç olarak dilbilgisel eşdizimlerin anlamsal eşdizimlere göre daha kolay öğrenildiği, eşdizim bilgisinin ingilizce seviyesi ile birlikte arttığı, İngilizce'ye maruz kalma miktarı, olgunluk ve sözdizimsel zorluğun eşdizim bilgi gelişimin etkileyen faktörlerdir.

Bonk (2000), Gitsaki (1996) tarafından yapılan bu çalışmadaki testlerin güvenilirliği çalışmada yer almadığından ve madde analizi sonuçlarına ulaşılamadığından, bu çalışmaya eleştirilerde bulunmuştur.

Durrant (2008): Durrant (2008) bu çalışmasında 3 soruya cevap aramıştır. Öncelikle anadil konuşurlarının dağarcıklarında kullanılma sıklığı yüksek olan eşdizimlerin ne derece başlı başına temsil edildiğine bakmıştır. Bir sözcük çağrışımı çalışması ve bir dizi sözcüksel karar testinin sonucunda eşdizimlerin sıklığının ve dağarcıkta temsilinin arasında kısıtlı bir ilişki bulunduğu görülmüştür. İkinci araştırma sorusu yetişkin dil öğrenicilerinin maruz kaldığı eşdizimleri öğrenmekte zorlanıp zorlanmadığıyla ilgilidir. Laboratuvar bazlı bir çalışma ve bir derlem analizi sonucunda sürekli bir maruz kalmanın eşdizim öğrenimini büyük ölçüde arttırdığı görülmüştür. Son olarak sıklıkla kullanılan eşdizimlerin bir listesini tutmanın mümkün olup olmadığına bakılmıştır. Bu tarz bir listeyi hazırlamanın mümkün olduğu ancak listeyi hazırlarken içerilecek eşdizimlerin özelliklerine dikkat edilmesi gerekildiği sonucuna varılmıştır.

Shehata (2008): Bu çalışmanın temel amacı, dilin öğrenildiği çevrenin (öğrenilen dilin konuşulduğu ülkede o dili öğrenme ve öğrenilen dilin konuşulmadığı bir ülkede o dili öğrenme), öğrenilen dile maruz kalınma miktarının ve ana dilin (Bu çalışmada yer alan katılımcılaın ana dilleri Arapça'dır.) İngilizce öğrenen öğrencilerin anlama ve üretim seviyesindeki eşdizim bilgisine olan etkisine bakmaktır. Çalışmada fiilisim ve sıfat-isim eşdizim türleri yer almıştır. Çalışma, Amerika'da bulunan ve ana dili Arapça olan 35 katılımcı ve Mısır'da bir üniversitenin İngiliz dili bölümünde okuyan 62 öğrencinin katılımıyla yürütülmüş ve bir adet eşdizim bilgisini anlama düzeyinde ölçen test, iki adet eşdizim bilgisini üretim düzeyinde ölçen test ve bir adet kelime tanıma testi yapılmıştır. Sonuçlar hem ana dilin hem de dil öğrenilen çevrenin eşdizim öğrenme üzerinde etkisi olduğunu göstermiştir. Ayrıca öğrenilen

dile maruz kalma süresinin eşdizim bilgisinin gelişimini pozitif anlamda etkilediği görülmüştür.

Alsakran (2011): Alsakran (2011), ana dili Arapça olup İngilizce öğrenen öğrencilerin anlama ve üretim seviyesindeki eşdizim bilgilerini test etmek ve yabancı dil öğrenilen çevrenin öğrenilen yabancı dildeki eşdizimlerin öğrenilmesine etkisini görmek amacıyla bir çalışma yürütmüştür. Fiil-isim, sıfat-isim ve fiil-edat eşdizim türleri çalışmaya dahil edilmiştir. Yapılan araştırma sonucu katılımcıların en iyi performansı fiil-isim eşdizim türünde gösterdiği görülmüştür. Ayrıca katılımcıların eşdizim bilgisi üretim düzeyine nazaran anlama düzeyinde daha iyi çıkmıştır. Yabancı dil öğrenirken çevrenin eşdizim bilgisini büyük miktarda etkilediği görülmüştür.

3. ARAŞTIRMA METODU

Özetin bu bölümünde çalışmada cevaplanacak araştırma soruları, katılımcılar, kullanılan testler ve araştırmanın uygulanması prosedürü açıklanacaktır.

3.1 Temel sorular

- 1) Orta altı ve ileri düzeyde İngilizce öğrenen öğrenciler arasında aşağıda belirtilen noktalar açısından istatistiksel olarak önemli bir fark var mıdır?
 - a) anlama düzeyinde eşdizim bilgisi
 - b) üretme düzeyinde eşdizim bilgisi
 - c) anlama ve üretim düzeyindeki eşdizim bilgisinin arasındaki korelasyon
- d) anlamsal ve dilbigisel eşdizimlerdeki performans (hem anlama hem üretme seviyesinde)
- e) test edilen 4 eşdizim seviyesindeki ayrı ayrı performanslar (hem anlama hem üretme seviyesinde)

- 2) Anlama ve üretme düzeyinde orta altı ve ileri düzeyde İngilizce öğrenen öğrenciler, anlamsal eşdizimleri mi yoksa dilbigisel eşdizimleri mi daha iyi biliyorlar?
- 3) Orta altı ve ileri düzey İngilizce öğrenen öğrenciler, test edilen 4 eşdizim türü arasından hangisini daha iyi biliyor?

3.2 Katılımcılar

Çalışmaya 18-20 yaş arası Orta Doğu Teknik Üniversitesi Temel İngilizce Bölümü (hazırlık okulu) sınıflarında orta altı ve ileri seviyede İngilizce öğrenen, ana dili Türkçe olan öğrenciler gönüllü olarak katılmışlardır. İleri seviyede az sınıf olduğundan ve ileri sınıf öğrencileri arasında nispeten daha az başarı farkı bulunduğundan, seviye hariç özel bir kriter konulmamıştır. Ancak, orta altı seviyedeki öğrenci çokluğu ve öğrencilerin başarı seviyeleri arasındaki çeşitlilik sebebiyle, homojen bir grup elde etmek adına, 11 farklı orta altı sınıftan ilk vize notu genel kurun vize ortalamasına yakın öğrenciler seçilmiştir. Orta altı kurda 17 erkek, 17 kız, ileri grupta 18 erkek, 16 kız olmak üzere toplamda 68 katılımcı çalışmaya dahil olmuştur.

3.3 Veri toplama gereçleri

Veri toplamak amacıyla iki adet test geliştirilmiştir. Testlerde iki adet anlamsal eşdizim çeşidi (fiil-isim, sıfat-isim) ve iki adet dilbilgisel eşdizim çeşidi (sıfat-edat, isim-edat) bulunmaktadır. Bu eşdizim çeşitleri, 35 adet üniversite düzeyinde İngilizce öğreten İngilizce öğretmeni ile yapılan kısa bir anket sonucunda seçilmiştir.

İlk test katılımcıların eşdizim bilgilerini anlama düzeyinde ölçmeyi amaçlamaktadır. Bu test için Shehata (2008) tarafından kendi çalışmasında İngilizce öğrenen Arap öğrenciler için hazırladığı testten yola çıkılmıştır. Aynı test, çalışma odakları farklı olduğundan birebir kullanılamamıştır. Bu nedenle yalnızca belli fiil-isim ve sıfatisim eşdizimleri alınmıştır. Aşağıdaki tablo Shehata (2008)'nın çalışmasından alınan eşdizimleri göstermektedir.

	Doğru eşdizimler	Yanlış eşdizimler
fiil-isim	play a role	*put the risk
	make a mistake	*get success
	eat soup	
	catch fire	
	take advantage	
sıfat-isim	second thought	
	short cut	
	last chance	
	soft drinks	
	heavy traffic	

Bu eşdizimlerin seçilmesinin arkasından diğer doğru eşdizimleri seçmek üzere 3 ana adım belirlenmiştir. İlk olarak *Word Frequencies in Written and Spoken English: based on the British National Corpus* (Longman: 2001) kitabından en sık kullanılan isim, fiil ve sıfat listelerinden kelimeler belirlenmiştir. Ardından bu kelimelerin eşdizimlerini bulmak üzere Google Ngram programı kullanılmıştır. Son adım olarak ise Google Ngram programının en sık kullanıldığını gösterdiği eşdizimler *BBI (The BBI dictionary of English word combinations)* sözlüğünden kontrol edilmiş ve bulunan eşdizimler arasında o sözlükte yer alan eşdizim testte kullanılmak üzere seçilmiştir. Bu üç adım sonucunda seçilen eşdizimler aşağıdaki tabloda yer almaktadır.

	Doğru eşdizimler	Yanlış eşdizimler
fiil-isim	have difficultyput an end	 make advice do a difference do panic gain money say a lie
sıfat-isim	fresh fruitbeneficial effect	 helpful time useful people clean information last technology strict cold original tongue stressful person
sıfat-edat	 successful in serious about important for late for sorry about open to free from 	 careful towards bad with different at necessary with poor on rich on tired on
isim-edat	 member of loss of reason for respect for solution to research on home to 	 need about problem through experience about decrease at influence towards interest about attitude through

Yanlış eşdizimler ise daha önce bahsedilen kısa ankette yer alan 35 öğretmenden toplanan gerçek öğrenci hataları ve araştırmacı tarafından gerçekte var olmayan yanlış eşdizimlerin yazılması sonucu oluşturulmuştur.

İkinci testte yer alacak eşdizimler de aynı 3 temel adımı izleyerek seçilmiştir. İkinci test katılımcıların eşdizim bilgilerini üretme seviyesinde ölçmektedir ve aşağıda yer alan tablodaki eşdizimleri içermektedir.

	fiil-isim	sıfat-isim	sıfat-edat	isim-edat
1	do business	close friend	bad for	comment on
2	have a look	strong competition	important to	admiration for
3	make an effort	long journey	high in	demand for
4	keep a diary	poor visibility	good at	side to
5	give birth	fresh coffee	full of	history of
6	hold hands	severe pain	similar to	use for
7	speak a language	daily life	essential for	answer to
8	live a life	significant difference	responsible for	degree in
9	run a business	heavy rain	sure of	pressure on
10	take time	great importance	effective in	benefit from
11	tell a story	detailed analysis	happy for	relationship with
12	pay attention	general rule	aware of	change in

İki testte yer alacak, yukarıdaki tablolarda yer alan toplam 104 eşdizim seçildikten sonra, testlerde yer alacak cümleler, İngiliz Ulusal Derlemi (British National Corpus-BNC) kullanılarak oluşturulmuştur. Anlama seviyesinde eşdizim bilgisini ölçen testteki cümleler (8-15 kelime), üretme seviyesinde eşdizim bilgisini ölçen testte yer alan cümlelere (15-30 kelime) göre daha az kelimeden oluşmaktadır. Bunun nedeni ise katılımcıların üretim seviyesindeki testte beklenen kelimeyi tahmin etmek için daha çok bağlama ihtiyacı olmasıdır.

Testlerin geçerliliği 4 uzmandan oluşan bir grubun testleri yorumlamasıyla kanıtlanmıştır. Ayrıca orta altı seviyeden 5 öğrenciden testlerin içeriği ve yer alan kelimelerin zorluğu ile ilgili yorum yapması beklenmiş ve bu yorumlar ışığında gerekli düzeltmeler yapılarak testlerin geçerliliği arttırılmıştır.

Testlerin güvenilirliği için ise pilot çalışma uygulanmış, anlama düzeyinde eşdizim bilgisini ölçen testi 35 katılımcı, üretme düzeyinde eşdizim bilgisini ölçen testi ise 50 katılımcı cevaplandırmıştır. Katılımcıların skorları istatistiksel olarak incelendiğinde her iki testin de yüksek ölçüde güvenilir olduğu ortaya çıkmıştır. Yine de pilot

çalışmadan sonra testler küçük değişikliklere uğradığından, pilot çalışmada yer alan katılımcıların sonuçları ana çalışmaya dahil edilmemiştir.

3.4 Yöntem

Her iki test birer hafta ara ile katılımcılara sınıflarında ders esnasında verilmiştir. İlk test için 15 dakika, ikinci test için ise 20 dakika zaman ayırılmıştır.

3.5 Veri toplama ve veri analizi

Toplanan veriler bilgisayara doğru cevap için 1, yanlış ya da boş bırakılan cevap için ise 0 olarak girilmiştir. Bu verilerin analizi için SPSS istatistik programı kullanılmıştır. Veriler üzerinde betimsel istatistikler, bağımsız grup t-testi, ANOVA, Tukey ve korelasyon analizleri yapılmıştır.

4. SONUÇLAR

Sonuçlar 3 ana kısımda incelenecektir. Öncelikle, ilk araştırma sorusunu cevaplamak üzere orta altı ve ileri düzey öğrencilerinin performanslarnı karşılaştıran analizler paylaşılacaktır. Ardından, ikinci araştırma sorusunu cevaplamak üzere orta altı ve ileri düzey grup performansları ayrı ayrı karşılaştırılacak ve anlamsal eşdizimlerde mi yoksa dilbigisel eşdizimlerde mi daha yüksek skorlara sahip olduğu incelenecektir. Son olarak ise, üçüncü araştırma sorusu olan her iki grubun ayrı ayrı hangi eşdizim türünü en iyi bildiklerini analiz eden test sonuçları paylaşılacaktır.

Araştırma sorusu 1 ve sonuçları:

Orta altı ve ileri düzeyde İngilizce öğrenen öğrenciler arasında belirtilen noktalar açısından istatistiksel olarak önemli bir fark var mıdır? a) anlama düzeyinde eşdizim bilgisi, b) üretme düzeyinde eşdizim bilgisi, c) anlama ve üretim düzeyindeki eşdizim bilgisinin arasındaki korelasyon, d) anlamsal ve dilbilgisel eşdizimlerdeki performans (hem anlama hem üretme seviyesinde), e) test edilen 4 eşdizim seviyesindeki ayrı ayrı performanslar (hem anlama hem üretme seviyesinde).

Anlama düzeyinde eşdizim bilgisini test eden sonuçlarına baktığımızda orta altı seviyenin ortalamasının 54.31, ileri düzey seviyesinin ortalamasının ise 76.89 olduğunu görüyoruz. Benzer şekilde, üretim düzeyinde eşdizim bilgisini ölçen test performanslarında orta altı seviyenin ortalaması 38.86 iken, ileri düzey grubun ortalamasının 72.74 olduğu görülmektedir.

Her iki testte de betimsel analiz yapıldığında anlamsal ve dilbilgisel eşdizim türleri kategorisinde de ileri düzey grubun orta altı gruptan daha yüksek ortalamalara sahip olduğu görülmektedir (Çalışmanın 4.2 bölümünde ortalamaların grafiğe dökülmüş hali bulunabilir.).

İlk araştırma sorusunu son alt başlığı olarak sorulan, her iki grubun test edilen 4 eşdizim çeşidindeki performansları incelendiğinde ise sonuç öncekilerden farklı olmamış, ileri düzey grubu her bir eşdizim türünde orta altı grubu istatiksel olarak anlamlı bir farkla geçmiştir.

Grupların anlama ve üretim düzeyindeki bilgileri korelasyon testine sokulduğunda ise, ileri düzey grubun anlama düzeyi bilgisi ile üretim düzeyi bilgisi arasında bir korelasyon olduğu görülmüştür. Orta altı grubun her iki testteki performansına bakıldığında ise bir korelasyona rastlanamamıştır. Bahsedilen tüm bu ortalamalar ayrı ayrı bağımsız grup t-testi ile incelenmiştir. Sonuç olarak ise araştırma sorusunun

kapsadığı 4 noktada (a,b, d ve e), ileri düzey grup orta altı gruptan istatistiksel anlamda farklı bir sonuç elde ettiği görülmüştür.

Araştırma sorusu 2 ve sonuçları:

Anlama ve üretme düzeyinde orta altı ve ileri düzeyde İngilizce öğrenen öğrenciler, anlamsal eşdizimleri mi yoksa dilbilgisel eşdizimleri mi daha iyi biliyorlar?

Hem anlama seviyesinde eşdizim bilgisini ölçen testte hem de üretim seviyesinde eşdizim bilgisini ölçen testte, orta altı grubun anlamsal ve dilbilgisel kategorisindeki eşdizimlerdeki ortalamaları bağımsız grup t-testine girilmiş, ve istatistiksel olarak anlamlı bir fark olmadığı sonucuna varılmıştır. İleri düzey grupta ise hem üretim seviyesinde eşdizim bilgisini ölçen testte hem de anlama düzeyinde eşdizim bilgisini ölçen testte, anlamsal eşdizim bilgisinin, dilbilgisel eşdizim bilgisine göre daha iyi skorlara sahip olduğu görülmüştür; bu skorların bağımsız grup t-testi sonuçları ile de anlamlı bir farka sahip olduğu doğrulanmıştır.

Araştırma sorusu 3 ve sonuçları:

Orta altı ve ileri düzey İngilizce öğrenen öğrenciler, test edilen 4 eşdizim türü arasından hangisini daha iyi biliyor?

Anlama düzeyinde orta altı grubun test edilen 4 eş dizim türündeki ayrı ayrı performansları birbirine çok yakın olduğundan, istatistiksel olarak anlamlı bir fark bulunamamıştır. Bu nedenle herhangi bir eşdizim türünü diğerlerinden daha iyi bildikleri söylenememektedir. Ancak, üretim seviyesinde bir eşdizim türü diğerlerine göre daha yüksek bir ortalamaya sahiptir. 4 eşdizim türü ortalamaları ANOVA testine girilmiştir. ANOVA testi sonucunun .000 olması ile ortalamalar arasındaki farkın anlamlı olduğu anlaşılmıştır. Ardından en yüksek iki ortalamaya sahip fiilisim (55.20) ve sıfat-edat eşdizimleri (46.38) Tukey testi ile analiz edilmiş ve orta

altı grubun, üretim seviyesinde fiil-isim eşdizimlerinde en yüksek performansa sahip oldukları görülmüştür.

İleri düzey grubunun 4 eşdizimdeki performansları da aynı analizlere sokulmuş ve hem anlama hem de üretim düzeyinde ileri düzey grubunun en iyi fiil-isim eşdizimlerini bildikleri anlaşılmıştır.

5. SONUÇLARIN TARTIŞILMASI

Çalışmanın bu bölümünde bir önceki bölümde paylaşılan istatistiksel analiz sonuçları yorumlanacaktır. Öncelikle iki grup arasında kıyaslama yapılacak, sonrasında da orta altı ve ileri seviye grupların sonuçları araştırma sonuçlarının sırasına göre ayrı ayrı incelenecek ve açıklanacaktır.

5.1. Orta altı ve İleri seviye grupların karşılaştırılması

a) Anlama düzeyi

Hipotezler ile de öngörüldüğü üzere, ileri seviyedeki öğrenciler, orta altı seviyedeki öğrencilerden ilk araştırma sorusunun tüm alt başlıklarında (anlama düzeyinde eşdizim bilgisi, üretme düzeyinde eşdizim bilgisi, anlamsal ve dilbilgisel eşdizimlerdeki performans (hem anlama hem üretme seviyesinde), test edilen 4 eşdizim seviyesindeki ayrı ayrı performanslar (hem anlama hem üretme seviyesinde)) daha iyi performans göstermişlerdir. Bu beklenen bir durumdur. Ancak göz önünde bulundurulması gereken önemli nokta, testlere dahil edilen eşdizimleri oluşturan tüm kelimelerin orta altı seviyesindeki öğrencilerin de bilmesi beklenen sık kullanılan kelimeler olduğudur. Ayrıca, güvenilirlik çalışmaları kapsamında testlerdeki kelime ve cümlelerin orta altı seviyedeki öğrencilerin de seviyesine uygun olduğu ve bilmedikleri bir nokta olmadığı görülmüştür. Tüm bunlara rağmen, orta altı seviyedeki öğrencilerinkine nazaran

çok düşük kalmıştır. Örneğin, ileri seviyedeki öğrencilerin anlama düzeyinde eşdizim bilgisini ölçen testteki ortalamaları 76.89 iken, orta altı grubun ortalaması 54.31 dir.

b) Üretim düzeyi

Katılımcıların üretim düzeyinde eşdizim bilgisini ölçen testteki performansları, anlama düzeyinde eşdizim bilgisini ölçen testteki performansları ile paraleldir. Bir başka deyişle, hipotezlerde de öngörüldüğü gibi ileri seviye öğrenciler orta altı seviyedeki öğrencilerden daha yüksek skorlara sahiptir ve ortalamalar arasındaki farklar istatistiksel olarak anlamlıdır. Yukarıdaki başlık altında da tartışıldığı gibi orta altı seviyedeki öğrencilerin bilmeleri gereken kelimelerin eşdizimlerini çok iyi bilmedikleri görülmüştür. Bu nokta da göstermektedir ki eşdizim bilgi seviyesi öğrencilerin genel İngilizce seviyeleri ile paralel olarak artmaktadır. Ayrıca çıkarılması gereken bir başka sonuç da öğrencilerin bildikleri kelimelerin eşdizimlerini de bilmeleri gerektiği konusunda bilnçleri de artmalı ve derslerde öğretmenler kelime öğretirken söz konusu kelimelerin eşdizimlerini de aynı anda öğretmeli ve öğrencilerin mümkün olduğu kadar çok bu eşdizimleri doğru şekilde kullanmaları sağlanmalıdır.

5.2. Dilbilgisel ve anlamsal eşdizim performansları

a) Orta altı seviye

Dilbilgisel ve anlamsal eşdizimlerdeki performanslarına bakıldığında, orta altı seviyenin ne anlama düzeyinde ne de üretim seviyesinde birini diğerinden daha iyi bildiği söylenebilir. Çünkü iki eşdizim kategorisinde de ortalamaları genel olarak düşüktür ve birbirine yakın ortalamalara sahiplerdir.

b) İleri seviye

İleri seviye öğrencilerin hem anlama düzeyinde hem üretim düzeyinde anlamsal eşdizimleri, dilbilgisel eşdizimlere göre daha iyi bildikleri görülmüştür. Bu sonuç göz önünde bulundurulduğunda öğretmenlerin dilbilgisel eşdizimlere daha çok önem vermesi gerektiği gerçeği ortaya çıkmaktadır.

5.3. Her bir eşdizim çeşidindeki performanslar

a) Orta altı seviye

Orta altı seviye öğrenciler, anlama seviyesinde test edilen 4 eşdizim türünün hiç birinde diğerlerinden daha iyi bir performans göstermemişlerdir. Ancak üretim seviyesinde en iyi performanslarının fiil-isim eşdizim türünde olduğu görülmüştür. Bu sonuç alanda yapılan diğer çalışmalara paralel bir sonuçtur (Shehata 2008, Alsakran, 2011). Göz önünde bulundurulması gereken nokta, derslerde fiil-isim eşdizim türü yanında diğer eşdizim türlerine de önem verilmesi gerektiğidir.

b) İleri seviye

İleri seviye öğrenciler hem anlama hem de üretim düzeyinde en yüksek performanslarını fiil-isim eşdizim türünde göstermişlerdir. Bir önceki başlık altında da belirtildiği gibi bu sonuç alandaki diğer çalışmanın sonuçlarıyla benzerdir (Shehata 2008, Alsakran, 2011).

6. ÇALIŞMANIN SINIRLILIKLARI VE GELECEK ÇALIŞMALAR İÇİN ÖNERİLER

Çalışma sadece Orta Doğu Teknik Üniversitesi'nde gerçekleştirilmiştir. Başka üniversitelerden katılımcılar da dahil edilerek çalışma genişletilebilir. Ayrıca mevcut

çalışmada her iki grupta 34 er olmak üzere toplam 68 katılımcı yer almıştır. Daha genellenebilecek sayılar elde etmek için daha çok katılımcı içerilebilir.

Çalışma dahilinde orta altı ve ileri düzey katılımcılar o düzeydeki diğer öğrenciler arasından yalnızca vize ortalamalarına bakılarak seçilmiştir. Düzeyine bakılmaksızın tüm katılımcılar standart bir İngilizce seviye tespit sınavına tabi tutulup sınav sonucuna göre gruplara ayrılırsa çalışmanın güvenilirliği arttırılabilir. Buna ek olarak, yalnızca orta altı ve ileri düzey öğrenciler değil, daha değişik seviyelerdeki öğrenciler de çalışmalara dahil edilebilir. İkiden fazla seviyenin dahil edildiği çalışmaların sonuçları sayesinde öğrencilerin eşdizim bilgilerinin ne yönde ve nasıl geliştiği daha iyi anlaşılabilir.

Mevcut çalışma, öğrencilerin eşdizim bilgilerini anlama ve üretim düzeyinde ölçerken yalnızca birer adet yazılı test uygulamıştır. Öğrencilerin özellikle anlama seviyesinde eşdizim bilgilerini ölçerken bilgisayar bazlı bir reaksiyon çalışması tasarlanabilir.

Bu çalışmada 4 eşdizim türü testlere dahil edilmiştir. Yapılacak yeni çalışmalarda daha çok ve farklı eşdizimler de içerilebilir. Buna ek olarak, öğrencilerin hataları incelenip hatalarının arkasındaki farklı sebepler incelenebilir.

APPENDIX P

TEZ FOTOKOPISI IZIN FORMU

<u>ENSTİTÜ</u>			
Fen Bilimleri Enstitüsü			
Sosyal Bilimler Enstitüsü			
Uygulamalı Matematik Enst	itüsü		
Enformatik Enstitüsü			
Deniz Bilimleri Enstitüsü			
<u>YAZARIN</u>			
Soyadı : Bağcı Adı : Nazife Duygu Bölümü : İngiliz Dili Öğretimi/ English Language Teaching			
TEZİN ADI (İngilizce): TURKISH UNIVERSITY LEVEL EFL LEARNERS' COLLOCATIONAL KNOWLEDGE AT RECEPTIVE AND PRODUCTIVE LEVELS			
<u>TEZİN TÜRÜ</u> : Yüksek L	isans	Doktora	
1. Tezimin tamamından kaynal	1. Tezimin tamamından kaynak gösterilmek şartıyla fotokopi alınabilir.		
2. Tezimin içindekiler sayfası, özet, indeks sayfalarından ve/veya bir ölümünden kaynak gösterilmek şartıyla fotokopi alınabilir.			
3. Tezimden bir bir (1) yıl süre	eyle fotokopi alınama	ız.	

TEZİN KÜTÜPHANEYE TESLİM TARİHİ: