Faculty of Humanities, Social Sciences and Education

Collocations in Farsi L2 Learners of English

The role of proficiency and L1 language transfer

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Master Thesis in English Linguistics
ENG-3991
Autumn 2015

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Abstract

The goal of learning collocations is to be able to put a word to actual and appropriate use. To use a word appropriately, it is not enough to know just the meaning of a word; we need to pay attention to the immediate context that it is used in. Both lexical and grammatical patterns are important to ensure that this happens. Collocations enable EFL learners to know more about language chunks used by native speakers and improve their skills in speech and writing. The present study investigates the correlation between language proficiency and knowledge of collocations, as well as the role of L1 transfer with collocations. The results show that there is a significant relationship between Iranian subjects' language proficiency, as measured by the Michigan proficiency test, and their knowledge of collocations, as measured by their performance on a collocation test designed for the current study. The results obtained from this research also indicates that Iranian EFL learners are more likely to use the correct collocation in cases where L1 transfer yields the correct combination in the L2 than when this is not the case. This suggests that positive transfer plays a major role when it comes to EFL learners' ability to produce the correct collocations in their L2.

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Acknowledgments

I would like to extend my deepest gratitude to my supervisor, Dr. Merete Anderssen, who through her useful guidance, suggestions and support made this thesis possible.

Besides, I am heartily grateful to express my words of appreciation to my lovely parents and my dear brothers for their unconditional love and never-ending support.

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Chapter 1

Introduction

1.1. Introduction

The goal of learning collocations is to be able to put words to actual and appropriate use. To use a word appropriately, it is not enough to know just its meaning; we need to pay attention to the immediate context that it is used in. Both lexical and grammatical patterns are important to ensure that this happens. Collocations enable EFL learners to know more about language chunks used by native speakers and improve their skills in speech and writing. The present study investigates the correlation between language proficiency and knowledge of collocations, as well as the role of L1 transfer with collocations. The results show that there is a significant relationship between Iranian subjects' language proficiency, as measured by the Michigan proficiency test, and their knowledge of collocations, as measured by their performance on a collocation test designed for the current study. The results obtained from this research also indicates that Iranian EFL learners are more likely to use the correct collocation in cases where L1 transfer yields the correct combination in the L2 than when this is not the case. This suggests that positive transfer plays a major role when it comes to EFL learners' ability to produce the correct collocations in their L2.

This chapter includes three sections designed to set the scene for the present study. The first section introduces collocations based on the ideas of different linguists. Then it focuses on second language acquisition with reference to collocations. In section two, the significance of studying collocations is investigated. Finally, section three describes the organization of the five chapters that comprise this thesis.

It is important to mention that the language uses in Iran is "Farsi" or "Persian". Both are correct to use.

1.2. Collocation and Second language acquisition

The fluent use of a native language is generally taken to involve the frequent use of collocations, that is, in every language, native speakers have access to thousands of words. By using their knowledge of grammar and vocabulary, they can understand and produce many

sentences that they have never heard or said before; however, they tend to put a large number of ready-made chunks of words together in different ways based on their communicative needs. Because of repeated use of the same chunks by members of a language community, words become a unit. In some cases, a group of words together can link the words in one chunk in the mind of the users of a language. Accordingly, when words are combined together in a chunk, they can predict each other's occurrence (Namvar, 2012). Palmer (1933) used the term "collocation" for the above phenomenon and identified it as two or more words that co-occur and must be learned as an integral whole. Many researchers have analyzed collocation in recent years. It has become increasingly clear that collocations also play a role in the acquisition of a second language. Kennedy (1998, p.108) argues that co-occurrence of certain words in the Bible by Cruden, goes back to 250 years ago. Palmer in the 1930s carried out corpus-based research on repeated combinations of English words (Kennedy, 1998, p.108). Following Palmer's work on collocations, Firth (1957, p.195) explained language in both linguistic and situational context with the following words, "You shall know a word by the company it keeps". This means that where we find one of the collocating words we can expect to find the other. MacCarthy (1990) argued that collocation is a marriage contract between words, and this makes it an important organizing principle in the vocabulary of any language. In fact, vocabulary knowledge is not only about the meanings of given words in isolation, but also knowing the words that tend to co-occur with it. This means that the environment in which the words occur is very important. As is clear, collocation has been defined in a number of ways; there is no single definition of collocation generally accepted by linguists. However, most of them are paraphrases of Firth's (1957) definition that collocations are words in habitual company. English is full of collocations and word combinations that co-occur more often than expected by chance. Why do we go somewhere "by train" but "on foot"? Why do we say "last week" and not "last hour"? We should know the meaning of a word both by its dictionary definition and the kind of words with which it is often associated. Fixed or more flexible collocations are the result of many years of habitual use by fluent speakers of English (Prodromou, 2003).

Automation of collocations is shown to help native speakers to explain themselves fluently since it provides chunks of English that are ready to be used. However second language learners lack this automation and make non-native word combinations when producing utterances. To reach native-like fluency, second language learners need to know that the ability to understand and produce collocations as unanalyzed chunks is a significant part of language acquisition (Farrokh, 2012). First language acquisition is a process where people

acquire the capacity to comprehend language, to produce and use words and sentences to communicate, while Second language acquisition (SLA) however is learning and acquiring a second language once the first language (mother tongue) is established. It deals with the acquisition of additional languages by both adults and children. For example, a child who speaks Farsi as his/her mother tongue begins learning English when he/she starts going to school. In modern life, becoming bilingual is a way of life. Although this concept is called second language acquisition, it can combine the learning of a third, fourth or more languages (Kasgari, 2013). In second language acquisition, recognizing what people learn while learning a new language has long been an important issue. According to Kennedy (2003), the main units of language learning have been considered similar to the traditional levels and units of language description; there are the sounds, words and rules of grammar and discourse. It should be added that second language teaching is one way to facilitate the learning process if the teacher understands the lingua background of the community as the correct way of second language acquiring (Kasgari, 2013). The teacher should have enough information about the relationship between language and culture and first language acquisition which are the important factors of second language learning. The TESOL (Teachers of English to Speakers of Other Languages) organization, in its Guidelines for the Preparation of teachers of English to speakers of other languages in the United States, cites the necessity for the TESOL teacher to "understand the nature of language, the fact of language varieties: social, regional, and functional, the structure and development of the English language system". Thomas Kuhn (1970) points to "normal science" as a method of puzzle solving in which part of the task of the scientist is to find the pieces, and then to fit the pieces together. Many of the pieces of the puzzle of second language acquisition are not yet found, although in this case the second language teacher as a scientist could be a great help to discover the pieces, and then to fit the pieces together. In recent years, collocation has become one of the main concerns in second language teaching and many teachers have come to know that the fluent use of a language depends on learning to use these occurrences of specific words. In this way, many research has tried to investigate learners' collocation competence in English as a foreign language (EFL) and it has become clear that EFL learners have serious problems with collocations (Lin, 2003; Nesselhauf, 2003). Collocation competence is important for producing language, and enables L1 and L2 language users to make idiomatic choices and come across as native-like, to process language fluently in real-time situations and to make the meaning of polysemous words unambiguous; for instance, the meaning of the verb "commit" becomes clear in these combinations: commit a crime, commit to memory,

commit oneself (Ellis et al, 2008). As a result, increasing amount of research have been conducted to understand learners' collocation competence. In recent years, collocations have attracted a notable amount of attention in second language acquisition circles and many authors working in the field of TESOL have confirmed the significance of collocation learning as a necessary part of second language education (Willis, 1990; Nattinger & Decarrico, 1992; Lewis, 1993). Many books with guidelines for collocation teaching have recently been published (Lewis, 2000; Lindstromberg & Boers, 2009; Davis & Kryszewska, 2012). In addition many EFL textbook authors have started to include sections on collocations (Richards & Bohlke, 2011). All of these resources indicate that the acquisition of collocations isan important part of learning a language and plays an important role in facilitating the native-like fluency that helps EFL learners choose correct language combinations.

It is clear from the above literature that having a basic knowledge of grammar and a large set of vocabulary is not enough for successful and fluent communication in second language acquisition. When it comes to mastering a foreign language, collocation is one of the most important areas that needs to be learned.

1.3. The significance of collocations in EFL classrooms

Collocation, is a challenging attribute of second language learning and as a vital element of communicative competence. A number of researchers (Cowie, 1981; Benson et. al, 1985; Lewis, 1997) have emphasized the value and significance of collocations for the development of second language word combinations and communicative competence. They all recommended teaching these ready-made chunks of the language to EFL learners to improve their performance. The aim of this section is to present the points of view of various researchers about the importance of studying collocation in different levels of language learning.

Benson et al (1985) believes that collocations are arbitrary and unpredictable. This makes it difficult for non-native speakers to cope with them. EFL learners mostly tend to learn the meaning and use of words individually but they don't pay attention to their collocation properties. Because of the arbitrary nature of collocations, researchers recommended the EFL teachers to motivate learners to learn collocations. In recent years, teachers and researchers have paid more attention to collocations in language development and teaching methods especially for EFL learners. It is easier to memorize a new word in a network of associations; this means that language chunks help learners to store information. In this way, by learning collocations, they will focus on specific lexical limitations. For instance, if the language

learners have some information about collocations like "a convenient situation" and "a convenient time" but not "a convenient person", they will automatically discover that the adjective "convenient" is just used with inanimate nouns. Carter and McCarthy (1988) claimed that English collocations are important both for English comprehension and English production. They argued that "collocations teach students expectations about which sorts of language can follow from what has preceded. Students will not have to go about reconstructing the language each time they want to say something but instead can use these collocations as pre-packaged building blocks" (Carter & McCarthy,1988, p. 75).

Nattinger and DeCarrio (1992) refer to collocations as the very center of language acquisition that improves speech, listening comprehension, reading and writing skills. Nation (2001, p.318) pointed out that some levels of correct use of collocation are important in regard to achieving native fluency, "all fluent and appropriate language requires collocation knowledge". Therefore, the significant role that collocations play in the native-like performance of EFL learners on the one hand, and the problems that EFL learners face with collocations of different types on the other hand, highlights the fact that collocation should be taken into consideration from the first stages of learning. In addition, there are a great number of word combinations in English that show countless collocations, and the mastery over them can strongly affect EFL learners' fluency and accuracy in writing and speaking.

Smith (2005) states there are some reasons that collocation should be involved in the curriculum. First, collocations are still problematic when non-native speakers try to select the correct combination of words even if they know the individual words. The need for learners to go beyond the intermediate plateau is the second reason. It is more motivating for upper level students. Most of the time, they can cope with using collocation but they try to avoid the more challenging tasks of advanced language learning. The third reason is that possessing knowledge of collocations improves the knowledge of vocabulary and helps fluency and decrease stress in communication. The last reason suggests that collocation errors are more harmful to the communication skills than the grammatical errors; because they result in producing unusual phrases or odd expressions.

According to the literature, arguments like "language knowledge", "efficient language acquisition" and "fluent language use" are among the most common ones used to refer to the significance of developing collocation knowledge of EFL learners. I explain each of them one by one.

The first argues that language knowledge needs collocation knowledge because collocations are everywhere. Hill (2000, p.53) states that the size of the phrasal mental lexicon is large.

The field of predictability of collocation is enormous. Usually, it is two-word or more-than-two-word collocations that constitute major proportions of the whole naturally-occurring text, spoken or written. Rather surprisingly, it is possible that "up to 70% of everything we say, hear, read or write is to be found in some form of fixed expression"(Hill,2000). It is this characteristic of collocations that calls for pedagogical consideration in classrooms. Collocations emphasize the organized patterning that exists in language and indicate that word-by-word approach is not a suitable way for findingmeaning in a text. Nation (2001, p.321) argues that the strongest position is that language knowledge is collocation knowledge because the stored sequence of words are the bases of learning, knowledge and use.

The second argument discusses that efficient language acquisition needs collocation knowledge. Generally, language is learned more effectively when acquired in chunks like routines or fixed phrases (Ellis, 2001). Hill (2000) discusses that learners understand the texts that teachers read loudly in class if they can hear the text correctly chunked. From time to time, students found the unseen reading difficult to understand because they did not recognize the chunks, they read every word as if it wasseparate from every other word. Thus, during silent reading students may be chunking in the wrong way. In addition, mis-chunking matters in comprehension. Correctly understood and stored, lexical items should be available for immediate use. If learners did not identify the items correctly, they could not store items correctly in their mental lexicon. Incorrectly chunked, the input would either not be stored at all or would be wrongly stored. In either case, it could not be available for retrieval and use. This supports the idea that collocations are classified in the mind in some way to enable more effective language processing for language production and language reception.

The last argument notes that fluent language use needs collocation knowledge. According to Pawley and Syder (1983, p.208) "memorized clauses and clause-sequences form a high proportion of the fluent stretches of speech heard in everyday conversation. Speakers show a high degree of fluency when explaining familiar experiences or activities in familiar phrases. We believe that memorized sentences and phrases are the normal building blocks of fluent spoken discourse". Furthermore, in a study of learners of French as a second language, Hawkins & Bazergui (1996) found that increased fluency resulted from learners storing memorized sequences.

As a result, with the advent of learner and learning-centered approaches to language learning and teaching, researchers (Nattinger, 1980; McCarthy, 1984; Lewis, 1993) started to highlight the role of collocation acquisition and recommended vocabulary training in EFL classroom practices.

1.4. Organization of the study

As pointed out at the start of this introductory chapter, this thesis aims to cover two general theoretical domains: collocations and second language acquisitions. More specifically, the purpose of this research is to investigate the relationship between language proficiency, language transfer and the knowledge of collocations. It aims to show that the reflections of using collocations in a correct way can be different at various proficiency levels. Thus, collocations seem to be a dominant factor in achieving the educational goal for the students learning a foreign language. That is to say, these traced collocation structures can also be an indication of which learning styles these learners can use to improve and to what extent they can provide success in foreign language achievement. This thesis has five chapters in addition to this introduction.

Chapter two is designed to provide the background of the study of collocations in the literature and also discuss relevant literature on the cause of collocation errors. It clarifies the differences between collocations and the other word combinations and gives a complete classification of collocations proposed by well-known linguists.The focus is on Benson et al's (1986a) categorization which is the main framework of this thesis.In addition, some teaching methods are presented which could improve the knowledge of learning collocations among EFL learners.

Chapter three is devoted to the methodology of the main study. It begins bystating the research questions, research type and design of the study. The goals of the current investigationis to determine (i) whether there is any correlation between language proficiency and the knowledge of collocationsin second language learners, and (ii) whether there is any L1 influence on the production of L2 collocation of second language learners (negative or positive transfer).Then it continues with a brief account of the participants' information and the data gathering instruments employed. In addition to this, a description of the procedures for data collection is provided.

Chapter four is allocated to the analysis of the quantitative data collected through the Michigan proficiency test and the collocation test scores of every student (female/male). These data were entered into the Pearson correlation package to obtain the final results. To answer the first research question, the correlation between the number of correct answers in the Michigan proficiency test and the collocation test were calculated using Pearson correlation test.The statistical measures in section 4.2 showed that there is a significant correlation between the results in the language proficiency test and the collocation test. To answer the second research question, the number of correct and incorrect answers influenced

by L1 transfer in collocation test was surveyed first. Next, the number of correct and incorrect answers not influenced by L1 transfer in collocation test was investigated. Then, both results were compared to each other to see if there is any L1 influence on the production of L2 collocation by Iranian EFL learners. The results in section 4.3.1 and 4.3.2 showed that there is a strong correlation between these two variables. The more L1 transfers EFL learners use, the more correct L2 collocations they produce.

Chapter five presents the results and the discussion of the main study. It compares the final results of this thesis with previous literature. It is concerned with the use of differences between different language proficiency levels and their knowledge of using collocations. It also presents a discussion of the correlation between collocations and language transfer. In addition, this chapter gives a general review of EFL learner's difficulties with collocations and ends with a discussion of some useful pedagogical implications.

Chapter 6 is the conclusion of the present thesis.

Chapter 2

The nature of collocations and their importance in Second language acquisition and foreign language teaching

2.1. Background of the study

This chapter provides an account of selected aspects of collocations relevant to my research and it is divided into five main sections. As a point of departure, it begins with some definitions of collocations proposed by well-known linguists in the field. Next, the nature of collocations and how it is different from other word combinations is elaborated in order for the reader to have a general picture of this phenomenon. Then, collocation classification based on different researchers' opinions is presented in the next section; special attention is paid to Benson et al's (1986a) theory, which, in fact provides the main framework of this thesis. The forth section concentrates on the causes of collocation errors in second language learning; in the realm of collocation error analysis, several studies are selected for reviewing this matter. Finally in the last section, I focus on the best teaching methods and strategies for collocation learning.

As one of the core theoretical components of this thesis is the construct of collocation, it is sensible to start with the most influential definitions that have been offered through the years.From the point of view of lexicon studies, collocation is a concept defined and comprehended in different ways (Bahns, 1993). Different linguists and researchers have set their own criterian to pursue their collocation studies. Generally speaking, there are three different claims about this term. The first claim argues that collocations deal with meaning, while the second does not regard collocation as a semantic relation between words.The third claim, which is the focus of this paper, is the structural approach that takes collocation to be determined by its structural patterns. According to this view lexis cannot be separated from grammar, because both are related aspects of one phenomenon (Bahns, 1993).

Regarding the first claim, Robins (1967) argues that studies on collocation started 2300 years ago in Greece. The Greek literature connected collocations to semantics and used the concept to study the semantic relationship between words. According to these ancient scholars, words do not exist in isolation and are interpreted on the basis of the collocation in which they are used (Robins, 1967). Actually, Firth is responsible for bringing the term into

prominence in the field of lexicon study (Carter &McCarthy, 1988; Hill, 2000). Firth (1957) claimed thatthe meaning of a word should be known by the company it keeps. To put it in other words, collocation is the meaning of a word and its relationship with other words (Carter &McCarthy, 1988; Hill, 2000). Most of the definitions used by Firth, who is the father of collocation research in modern times, are similar to those of ancient Greek scholars; it is generally accepted that Firth is the first linguist in modern times that goes through the notion of collocation and introduces it as a theory of meaning. Following Firth's point of view, McIntosh (1961) added a notion of words that means that a word might be combined with a whole other set of words that has some semantic features in common. For instance, nouns like "metal and iron" might be used with the adjective "molten". McIntosh discusses that words only have a certain tolerance of compatibility. This kind of knowledge of ranges helps to separate the acceptable collocations from unacceptable ones (McIntosh, 1961). In addition, Bolinger and Sears (1981) also argue that the ranges and diversity of collocations are vast. They explain collocation as "a kind of habitual association of words" and proved that collocations are the result of native speaker's experiences of the expressions, repeated again and again in given circumstances. Thus, based on the context, "good chance" and "strong likelihood" might be assumed as acceptable collocations while "strong chance" and "high likelihood" were unacceptable. In the words of Lewis (1997, p.44) "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". Sinclair (1966) was another researcher who was very interested in generating lexical sets by the use of collocations and wrote a volume of papers in memory of Firth. In this volume, he argued that "grammar" and "lexis" are two separate aspects. The former can be explained by structures (syntagms) and systems (paradigms), but the latter aspect consist of lexical items collocating with each other and sets collocations respectively. This means collocations refer to the co-occurrence of two words, but this co-occurrence does not show that these two words occur as a small fixed grammatical set. "He argued strongly", "his argument was strengthened" and "the strength of his argument" are some examples that demonstrate a fixed relationship between thetwo words, according to Sinclair. (1966, p.42).

Contrary tothe second claim that says collocation is not a semantic relation between words, some linguists present definitions that are quite different from the above ones. McCarthy (1991) views the notion of collocation as a kind of cohesive device. According to his point of view, collocation points to the probability that lexical items will co-occur, but there is not a semantic relationship between words. Thus, collocations offer other functions besides the

meaning in the sentences. The notion of collocation is not raised creatively for the first time; people have a memory of having heard or seen these structures before and apply them as such. Furthermore, collocations have been discussed by Halliday and Hasan (1976, p.19) from the point of view. They explained the concept of collocation as "the cohesive effect of pairs of words", like flame-candle, king-crown and hair-comb. They argue that such patterns might generate a cohesive force if they occur in an adjacent sentence. Choueka (1988, as mentioned in Manning &Schutze, 1999) describe collocations as a combination of two or more consecutive words with a specific behavior that has the characteristics of a syntactic unit, and whose accurate meaning or connotation cannot be derived from the meaning of its components.

Finally, the third claim to collocations is a structural one. Benson et al (1986b, p.23) proposed the following description of collocations: "collocations are loosely fixed, arbitrary recurrent word combinations and the meaning of the whole do reflect the meaning of the parts. *"Pure chance"*, "to commit murder", "close attention" and "keen competition" share the features of this category". In addition, Benson (1989) argued that the linguistic treatment of collocations should take into account three typical criteria (as cited in Manning &Schutze, 1999). The first is Non-Compositionality. That is, the meaning of a collocation is not a straightforward composition of the meanings of its parts. Either the meaning is totally different from the free combinations or there is an added element of meaning that cannot be predicted from the parts.   In contrast, Magnúsdóttir (1990) argues for a rather different position on the compositionality of collocations. She described collocations as a string of words that co-occur under limitations not definable by selection restrictions alone or by syntax. As the selection of the lexical unit is not conceptual, these limitations can be considered as lexical limitations; therefore, synonyms cannot change any of the components of a particular collocation. The second is Non-Substitutability, that shows the fact that we cannot substitute close-synonyms for the constituent parts of a collocation. The third is Non-Modifiability, which refers to the fact that most collocations cannot be freely modified through grammatical transformations or with additional lexical components. For example, even if a noun like "frog" usually can be modified by adjectives like "ugly", we cannot modify frog in "to get a frog in one's throat" into "to get an ugly frog in one's throat". This is mostly true for idioms.

Although collocations seem to be one of the most error-generating and problematic areas of vocabulary learning, especially for second language learners, there is no definite and unanimous opinion over the definition of collocation. In spite of all these various definitions

in this area, it is still difficult to distinguish collocations from other word combinations. The section below presents some ways that facilitate separating collocations from the other combinations.

2.2. Collocation and other combinations of words

Words can be combined in various ways to make meaningful groups. This is what makes it difficult to clarify the notion of collocations. Among these word combinations, some are fixed and some are looser. To make the concept of collocation more understandable, it is essential to draw a distinction between idioms, collocations and other kinds of word combinations, even though these combinations are very similar to each other (Bahns, 1993; Wu, 1996).

Howarth (1993) tried to distinguish word combinations by dividing them into four groups; the first group is "Free combinations"; the meaning of a free combination is interpreted from the literal meaning of individual elements, like "drink coffee" or "drink tea". The second group is "Restricted collocations", which are collocations that are more limited in the selection of compositional elements and usually have one component used in a specialized context, like "perform a task". The third group consists of "Figurative idioms" which have a metaphorical meaning as a whole that can somehow reveal its literal interpretation, like "do a U-turn". Finally, "Pure idioms" belongs to the forth group. A pure idiom is a single unit whose meaning is completelyunpredictable from the meaning of its components, such as "blow the gaff". This idiom means "to cause trouble for someone by letting other people know something that they were trying to keep secret". As is clear, it is impossible to predict the correct meaning of the combination.

Nesselhauf (2003) refers to the term "arbitrary restriction on substitutability" to separate the collocations from other types of word combinations. He goes through the concept of collocation in a phraseological manner; this means that in dealing with word combinations, there should be a difference between combinations where a possible limitation on the substitutability of elements is due to their semantic properties (like free combinations) and combinations where this limitation is arbitrary (like collocations). As an example, in the combination of "read a book", it is impossible or at least very unusual to substitute it with "drink a book" or "read water". Because "drink" needs a noun with the semantic feature of "liquid" and "read" needs a noun with the semantic feature of "including written language". However, word combinations like "reach a decision" , the word "decision" can be replaced by different nouns such as "conclusion", "result" or "goal" but not with "aim" for example. These kinds of limitations could not be the result of the semantic features of the two elements

concerned, but to some extent an arbitrary convention of the language. This is something which separates collocations from free combinations. Subsequently, Nesselhauf (2003) adds that in every collocation, one element is chosen purely based of its meaning but the selection of the other depends on the first element.

Benson et al. (1986b) also distinguish collocations from other word combinations like idioms, compounds, transitional collocations and free combinations by classifying them into five groups. The below list is set from the most fixed to the most free combination.

- There is no alternation at all among **Compounds** that are the most fixed word combinations and they are completely frozen. Examples of nominal compounds are "floppy disk" and "aptitude test", and an instance of compound verb, can be illustrated by the phrase, "break through".

- **Idioms** refer to relatively frozen expressions where the meaning of the whole is not clear from the meaning of their component parts. "To kill two birds with one stone" and "to spill the beans" are examples of this group.

- **Transitional combinations** are regarded as more frozen and less variable than collocations, the meanings of entire combinations are close to their component parts. For instance "for old time's sake" or "to be in a tight spot".

- **Collocations** refer to loosely fixed, arbitrary recurrent word combinations in which the meaning of the whole reflects the meaning of the parts. "Close attention" and "keen competition" are the examples of this type.

- **Free combinations** are taken as the least cohesive of all combinations. Their components are the freest to be combined with other lexical items. "To recall an event (an accident, an adventure)" and "to investigate (report, analyze) a murder" are regarded as an examples of this group.

Echoing what Benson et al. (1986b) attested, Bahns (1993) also admits that, contrary to idioms, the main characteristics of collocations are that their meanings reflect the meaning of their constituent parts, and that, compared to free combination, they are used frequently, spring to mind readily, and are psychologically salient. In other words, "there are transitional areas between free combinations and collocations, and between collocations and idioms". (Cruse, 1986, p. 41).

Wood (1981) applied both syntactic and semantic criteria to separate collocations from idioms, what he refers to as colligations, and free combinations. According to Wood, a free combination is completely productive and compositional, but an idiom is completely non-productive and non-compositional. Collocation is the way one word co-occurs with the other word, while colligation is the way one word regularly co-occurs with a certain grammatical pattern. For instance a noun might typically appear preceded by a possessive pronoun such as "It's my/your/our responsibility to" rather than an article like "but I'll take the responsibility for" (Wood, 1981, p.87). Another example is how some verbs typically occur with a particular tense, such as auxiliary verbs that always occur with bare infinitive like "I must study" or "She can dance".

As is clear, by understanding the concept of different word combinations in principles of language learning and teaching, it is easier to determine collocations and apply them in daily communication. As this thesis is mainly concerned with the use of collocation by EFL learners, it seems sensible to provide an account of different classifications of collocation relevant to this wide research area. What follows, then, is a brief account of the literature on collocation categorization by different researchers. Again the focus is on Benson et al's (1986a) work, and the details of the framework which forms the foundation of this thesis.

2.3. The classification of collocations

Since many different definitions of collocation have been provided, there should be many theories for classifying them as well. Mainly when it comes to classification of collocations, many collocation studies (Bahns, 1993; Liu, 1999a, 1999b, 2000a; Wang, 2001) focus on what Benson et al. (1986a) advocated in this regard.

Benson et al. (1986a) sorted collocations into two main groups: grammatical collocations and lexical collocations. The first group is a phrase that is made by combination of a dominant open class word such as a noun, a verb or an adjective, plus a grammatical word like a preposition or grammatical structural pattern like a clause or an infinitive. The second group, on the other hand, only has different combinations of nouns, adjectives, adverbs and verbs. It excludes clauses, infinitives or prepositions. According to Benson et al. (1986a), there are eight major kinds of grammatical collocations and seven kinds of lexical collocations. I have listed the structures and related examples here to make the concept clearer:

Lexical collocations adopted from Benson et al. (1986a)

- Verb (donation creation or activation) + noun (pronoun or prep. phrase)

make an impression, compose music

- Verb (meaning eradication or nullification) + noun

revoke a license, demolish a house

- Adjective + noun — *a crushing defeat, strong tea*
- Noun + verb — *album comes out, bombs explode*
- Noun + noun — *gallery space, a pack of dogs*
- Adverb + adjective — *deeply absorbed, gratefully appreciated*
- Verb + adverb — *appreciate sincerely, argue heatedly*

Grammatical collocations adopted from Benson et al. (1986a)

- Noun + preposition — *authority over*
- Noun + to-infinitive — *I was a fool to do it.*
- Noun + that-clause — *He took an oath that he would do his duty.*
- Preposition + noun — *on purpose, in advance*
- Adjective + preposition — *She is hungry for news, you are afraid of her.*
- Adjective + to-infinitive — *He is easy to please.*
- Adjective+ that-clause — *He was afraid that he would fall.*
- Different verb patterns in English. This group itself divides into 15 patterns as below:
    - (Subject + verb + object 1 + to + object2)

      She sent a letter to her sister.

    - Subject + verb + object1+ to + object2

      I explained the problem to him.

    - (Subject + verb + object1 + for + object2) or (subject + verb + object 1 + object 2)

      They bought a bicycle for their son.
      They bought their son a bicycle.

    - (Subject + verb + preposition + object) or (subject + verb + object + preposition + object)   You came by airplane.

      She invited me to the party.

- Subject + verb + to + infinitive   *They began to run.*

- Subject + verb 1 + verb 2   *She enjoyed washing the dishes.*

- Subject + verb + object + to + infinitive *She asked me clean.*

- Subject + verb + object + infinitive   *I heard him leave.*

- Subject + verb + object + verb-ing   *I caught them stealing my bag.*

- Subject + verb + possessive + verb-ing   *Please excuse my waking you so early.*

- Subject + verb + that clause   *I confirmed that I was wrong.*

- Subject + verb + object 1 + object 2   *He gave me five dollars.*

- Subject + verb + object + adverbial   *We carried ourselves well.*

- subject + verb + wh-word   *She accept what I want*

- (Subject (it) + verb + object + to + infinitive) or (subject (it) + verb + object + that-clause)   *It surprised me to learn of your decision.*

It surprised me that her offer was rejected.

Concerning the last group, there is a disagreement among linguists. Some considers these combinations as grammatical categories in English while others put it in minority collocational categories. When it comes to grammatical combinations, it is difficult to draw a line between collocations and grammatical rules. As mentioned above, Benson et al (1986a) regards this subgroup as collocations while based on the information provided above in section 2.1. Sinclair (1966) argues that "grammar" and "lexis" are two separate aspects. Sinclair (1991) also notices that there are two types of collocations: downward collocation and upward collocation.He uses two terms to categorize collocations. First, the term "node", which was applied to refer to the word studied. Second, the term "collocate" that was employed to represent any word occurring in the specified environment of a node. Based on his claim, when A is a "node" and B is a "collocate" – the collocation of A with a less frequent word B, is called downward collocation that contribute to a semantic analysis of a word. However, when B is the "node" and A is the "collocate", this is called upward collocation. In this kind of collocation, "the words tend to be the elements of grammatical frames, or super-ordinate" (Sinclair, 1991, p.116). On other words, downward collocation is

collocation with words that are less frequent than the node. In contrast, upward collocation is collocation with words that are more frequent than the node. To make it more clear Sinclair (1991, p.116) provides an example. If "utterly" (collocate) collocates with "confused" (node) and "confused" is more frequent than "utterly", then "utterly" influences the meaning or prosody of "confused". But, if a word like "very" (collocate) collocates with "confused" (node), it adds very little to the meaning of "confused" because it is so much more common.

   Lewis (1997) argued that collocations can be classified as strong, weak, frequent and infrequent. The difference between weak and strong collocations is made on the basis of their restriction and fixedness. However, the distinction between frequent and infrequent collocations is based on their frequency of co-occurrence in a corpus. The strong collocations are known as tightly linked phrases that behave like single words. "Drug addict" is an example of this type. Weak collocations such as "a nice day" and "a good chance" are combined with two common words and each of them often occurs with other words.

   Lewis (2000) follows Benson et al.(1986a) and divides collocations into different types. I have rearranged them in order that those who are related to nouns precede other types.

The classification of collocations adopted from Lewis (2000)

- Verb + noun   submit a report

- Noun + noun   radio station

- Verb + adjective + noun   revise the original plan

- Adjective + noun   a difficult decision

- Compound noun   fire escape

- Binomial   backwards and forwards

- Trinomial   hook, line and sinker

- Noun + verb   the fog closed in

- Verb + adverb   examine thoroughly

- Adverb + adjective   extremely inconvenient

- Discourse marker   to put it another way

- Multi-word prepositional phrase   a few years ago

- Phrasal verb   turns in

- Adjective + preposition   aware of....

- Fixed phrase   On the other hand....

- Incomplete fixed phrase   a sort of....

- Fixed expression   not half!

- Semi-fixed expression   See you later/tomorrow/on Monday.
- Part of a proverb   too many cooks....
- Part of a quotation   to be or not to be.... (Lewis, 2000, pp. 133-134)

    In the present study, the definition of collocation is based on co-occurrence of words and the classification of collocations focuses on the division proposed by Benson et al (1986a). As pointed by Bahns (1993), there are tens of thousands of collocations and this is a barrier to teaching them systematically; therefore, I only consider some of them here. The types of grammatical collocations used in this paper are "noun + preposition" and "preposition + noun". The types of lexical collocations are "noun + verb" and "noun + noun". The selected combinations are among those that give us a clearer picture of various behaviors of the feature combinations.

2.4. Cause of collocation errors in second language acquisition

    In this section, the problems that EFL learners face while learning collocation is discussed. The most common way of studying collocations in L2 is through error analysis, which is understandable, because this approach is fundamental to a number of teaching methods. In this regard, a review of empirical studies on analyzing causes of collocation errorsby EFL learners revealed that EFL learners were incapable of producing proper English (Farghal&Obiedat, 1995; Liu, 1999a, 1999b, 2000b). Studies reported on in this section reveal that useful strategies and suitable teaching methods are important factors to improve learners' collocation knowledge.

    Even though collocations are said to be a significant part of achieving native-like competence in foreign language learning, it has been neglected by research and there has not been enough attention paid to teaching collocation neither in traditional methodologies nor in modern approaches. Although some research on the importance of collocations has been done in recent years, it is still unclear which of the great number of collocations in a language should be taught. To answer these kinds of questions, the first step is to recognize the problems that the EFL learners face in dealing with collocations. The goal of this section is to elaborate on this issue as an important, yet largely un-researched area of the language competence of EFL learners.

    After Palmer's discussion of collocations in 1930, second language teachers have thought of collocations as both an opportunity and a problem. Dechert and Lennon (1989) in their study found that collocation could be one of the reasons why even advanced English learners who

have studied English for at least ten years cannot produce native-like language, resulting in misunderstandings. In general, these difficulties are based on different variables like learners' native language, age, personality and background. In fact, collocations can be described as native speakers' intuitive knowledge of which words go together and which do not; therefore, non-native speakers with a lack of communicative competence have many problems in this area. Many EFL learners, even at the more advanced levels, have sufficient access to lexical or grammatical knowledge; but they cannot use collocations in a correct way. For example, English speakers say "make a mistake" which is an acceptable collocation in English. Iranian speakers use "do a mistake" in their language and when it comes to English, they think in their native language and say or write "do a mistake" instead of "make a mistake". Referring to empirical studies, there are several factors that affect EFL learners' performance in making correct collocations. "Transfer" (which itself divided into "interlingual transfer" and"intralingual transfer"), "overgeneralization"(which is a sub-group of intralingual transfer), "paraphrase" and "shortage of collocation knowledge" are the main reasons of collocation errors (Bahns&Eldaw, 1993; Channel, 1981; Ellis, 1985; Farghal&Obiedat, 1995; Liu, 1999a, 1999b, 2000b). These factors will be used later in this paper to clarify the discussions about collocations; thus, I will present a definition followed by examples here to give the readers a view of what I mean when I use these terms.

Transfer refers to the influence resulting from similarities and differences between the first language and any other learned or acquired language. In fact, transfer refers to the use of the learner's knowledge about their native language (L1) in a second language (L2). There are two types of transfer: positive transfer and negative transfer. Positive transfer happens when a structure in the L1 is used in an L2 utterance and the result is target-like in the L2, while negative transfer occurs when a structure in L1 is applied in an L2 utterance and the result is incorrect (Oldin, 1989).

Interlingual transfer is the negative effect of the mother tongue of EFL learners in the target language. This means that native language habits interfere or prevent EFL learners from acquiring the patterns of second language (Brown, 1980). For instance, "I am agree" is one of the most common errors among Iranian EFL learners. "Be" must always apply with "agree" in their L1 sentence structure; while it is not an acceptable structure in English. Interlingual transfer causes EFL learners to think in their native language patterns and transfer them into the second language, which results in non-target-like structures.

Intralingual transfer is the negative transfer of items within the target language. It relates to errors due to the language being learned, independent of the native language. In other

words, intralingual transfer is the incorrect generalization of the rules within the target language (Brown, 1980).

Overgeneralization is a sub-type of intralingual transfer andhappens when the EFL learners create a deviant construction on the basis of other structures in the target language (Richards, 1971). This means that they generalize a familiar rule that they have learned before and use it in some other structure in a wrong way. For example in a sentence like "She drives", EFL learners know that "s" adds to the verb to form the third person singular. But they generalize this rule more than necessary in many different structures like "She can drives" which is not grammatical in English.

Bahns & Eldaw (1993) argue that L1 transfer is an important reason for collocation errors among many EFL students. This conclusion was confirmed by Farghal & Obiedat (1995) in their studies about collocations. Farghal & Obiedat (1995) tried to test the knowledge of English lexical collocations among Jordanian EFL learners. For this purpose, they decided to use two different tests: a fill in the blank test and a translation task. The fill in the blank test involved questions that have chosen from various types of lexical and grammatical collocations. The other test was translating a text from Arabic (which was the learners' native language) to English. Both tests were used to measure the knowledge of EFL learners about collocations. They divided the participants into two groups. The first group consisted of 34 seniors who were studying in an English language program and took the fill in the blanks test. In the second group, there were 23 seniors majoring in English language at the higher college for the accreditation of teachers and they took a translation test. According to the results, the first group cannot easily cope with collocations. In most of the cases, when the subjects did not know a specific collocation, they tended to resort to strategies such as synonyms in *top of the winter* instead of *height of winter*, paraphrasing in *little dinner* instead of *light dinner*, and transfer in *heavy tea* instead of *strongtea*. The result was similar for the second group as well. Both the EFL learners and the English teachers suffered from a lack of collocation knowledge and the main reason of collocation errors was L1 transfer. This means that there are differences between the collocation patterns in various languages, but second language learners ignore this fact and transfer the collocation structures of their mother tongue to the target language. This causes semantic or syntactic errors. Second language learners mostly think that there is always a one-to-one correspondence between L1 and L2 collocation patterns. In cases where there is an overlap, this might help, and this is why they tend to bring L1 collocations into L2 ones. However, transfer from the L1 is also a main source of error because even equivalent lexical items do not always transfer the same meaning in two

different languages. If second language learners do not get collocation associations as a part of their second language vocabulary knowledge, they will produce strange or unusual combinations because of the process of transfer, such as those observed by Farghal & Obiedat (1995) in their study.

The acquisition of transferability of collocation patterns from the first language into the second language setting is an indication of a cross-linguistic effect in the context of interlanguage. Its significance as a property of second language acquisition has been evaluated in different ways through the history of second language acquisition. Interlanguage speakers use transfer in communication in both second language production and reception. Transfer in production is a process of activating the first language to reach a communicative goal. In comprehension, this process relates to a reliance on the first language patterns in interpreting the incoming utterances (Johnson & Johnson, 1999). The strategy of positive and negative transfer regarding the influence of the mother tongue on collocations by second language learners in their L2 have been studied by different researchers(Biskup, 1992; Kellerman, 1983; Martelli, 1998; Brown, 2001).

Kellerman (1983) points out that there is a lot of evidence for the influence of the L1 on the L2 for learning second language lexis. The acquisition of lexis seems to be facilitated if the L1 and the L2 are related languages. In some cases transfer ends up in correct collocations, even though EFL learners assume that there is a one-to-one correspondence between the first and the second language. This means that first language transfer may help the language learners to select the correct collocates. For instance, "enough time" and " traditional food" are among positive transfers from Iranian native language to English as a second language. In contrast, Martelli (1998) believes that first language transfer may cause misunderstandings and the production of wrong word combinations. For example, Iranian EFL learners use "new vegetables" instead of "fresh vegetables". In this case, native language transfer may be assumed as the source of the error.

Shalev (2000) argues that EFL learners may use collocations in the wrong way if their mother tongue is different from English. But the results of a study which was carried out by Biskup (1992) went against Shalev's (2000) expectations. She did a comparative study to determine the reasons why learners make collocation errors. She chose two groups of subjects. The native language of the EFL learners in group one were German, which is genetically close to English. Polish was the native language of the EFL learners in the second group, which is more distant from English. Biskup (1992)suggests to discover if this factor affects EFL learners' performance on second language collocations. After a proficiency test,

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the participants from both language groups were selected among advanced L2 learners. They were both asked to translate 23 sentences into English; all the sentences consisted of collocations. After data analysis, clear differences between these two groups appeared. The polish students produced more collocations compared to the German students; but they more often gave no answer at all. However, the German students more frequently relied on paraphrasing the intended meaning without using a collocation but they made more mistakes than the Polish students. Biskup (1992) believes that creative strategies on the part of the German students and the emphasis on accuracy on the part of the Polish students could be the results of foreign language teaching in the two countries. Furthermore, she found that the L1 influence on non-native forms is higher among the Polish studentsthat had a positive result, than the German students. As we can see, the result of Biskup's (1992) study was surprising; if we accept Shalev's (2000) view that EFL learners have more problems with collocations if their mother tongue is different from English, then we expected to see more collocation errors in the Polish students' translation task. However the conclusion was exactly the opposite and the German students made more mistakes in producing collocation structures. What is important here is that based on empirical evidence, first language transfer is a central phenomenon that must be taken into consideration in second language acquisition. In addition, collocation is one of the areas that is highly influenced by first language transfer (Ringbom, 1987).

Various studies by Liu (1999a, 1999b, 2000b) show that similar strategies were used by EFL learners in producing either acceptable or unacceptable collocations in their writing. I start with the first study, in which Liu (1999b) investigated collocation errors in Chinese college freshmens' writing. The data consisted of 94 learners' compositions and127 copies of students' final exam papers. 63 errors were categorized into fourteen kinds of grammatical and lexical collocation errors on the basis of a specified category system proposed by Benson, Benson and Ilson (1986a). He concluded that there are different reasons for producing unacceptable collocations but the "lack of the collocation knowledge" and "interlingual transfer" were among the most significant ones. First, he explained that some EFL learners only understand the basic meaning of the word without knowing which words it would go with. Therefore, they could not produce any collocations successfully. He refers to this as the "lack of collocation concept". Second, some EFL learners only focus on "direct translation" to produce collocations because they just remembered the Chinese translation of the word. For instance, they used "learn knowledge" which is an unacceptable combination in English instead of "gain/absorb knowledge". Third, some EFL learners "ignore the rule restrictions".

This means some of them did not know that some collocation restrictions were based on the meaning of the word and range. Others did not pay attention to grammar and produced grammatically unacceptable collocations. For example, using "few knowledge" instead of "little knowledge". Liu called the forth one "lack of knowledge of collocation properties". This suggests that EFL learners did not understand the potential collocation properties of the words they knew. As an example, the collocation "a good girl" used a lot by the students because they were quite familiar with it while few of them produced the collocation "a good knowledge".

In the second study in this field by Liu (1999a), he found six sources of collocation errors. A small number of errors caused by "word coinage and approximation" were described as related to communication strategies, but most of the errors were related to "negative interlingual transfer". "Ignorance of rule restrictions", "the use of synonyms", "false concepts hypothesized" and "overgeneralization" were the four types of intralingual transfer identified by Liu (1999a) and were referred to as cognitive strategies. Liu (1999a) explained these strategies further as following:

Word coinage is a kind of paraphrase applied to make a new word to transfer the desired concept. "to see sun-down" instead of "to see the sunset" was an error of this type. While **approximation**, which was another kind of paraphrase, referred to the incorrect use of vocabulary items or constructions that share semantic specifications. For instance, "middle exam" is a wrong collocation structure that was used instead of "midterm exam".

Negative interlingualtransfer is collocation errors caused by direct translation. "wait your phone call" is an acceptable collocation in Chinese, but when they were translated into English, they are not acceptable.

Ignorance of rule restrictions refers to the production of incorrect collocations by EFL learners due to "analogy" and "failure to specify the restrictions of existing structures". For instance, "to make Tina embarrass" was an incorrect analogy of the structure verb + object + infinitive that was used instead of "to make Tina embarrassed".

The **Use of synonyms** is another strategy. "Receive other people's opinion" is the wrong collocation that was taken as a straightforward application of the open choice principle instead of "accept other people's opinion" in Farsi.

False concept hypothesis occurs when EFL learners had misconceptions about verbs like "do", "make" and "take" and thought that they could be replaced by another freely. For instance, "do plans" was used instead of "make plans".

When the items did not have a clear contrast for EFL learners, they started to use **overgeneralization**. This means the creation of one deviant construction in place of two regular constructions according to the experience of the second language that the EFL learners were making. For example EFL students combine "am used to something" with "used to taking" and produce a wrong collocation "am used to take" instead of "am used to taking".

The above overview shows that first language influence has a strong effect on the learners' production of collocation errors. After finding the main causes of EFL learners' errors, Liu carried out more research to find a way of overcoming these errors. In another study, Liu (2000)tried to test the effect of teaching on EFL learners' collocation competence on Verb + Noun lexical collocation construction in a class. The subjects were 89 senior students. Based on their scores in an English proficiency test, Liu divided them into two groups: high-achievement and low-achievement. To measure the learners' collocation competence, three collocation tests were chosen. Each test included three parts: a fill in the blank task, a multiple choices task and a questionnaire. The EFL learners took the first test without any collocation instruction, while tests two and three were taken after collocation training. The activities included identifying collocations in texts, distinguishing collocations from idioms, brainstorming for collocates of a word, finding the usage of de-lexicalized words, making good use of collocations in EFL writing, specifying the usages of near synonyms, using dictionaries productively and becoming aware of collocation error. The training lessons lasted 150 minutes and consisted of eight different teaching techniques. The results showed that both groups had significant progress after collocation teaching but it was more observable among low-achievement learners. The questionnaire also verified that collocation teaching activities had a positive impact in both groups.

Furthermore, from the result of all her studies, Liu (2000b) extracted seven strategies that EFL learners might use in producing lexical collocations in their writing.I have listed these strategies below:

Retrieval refers to the learners' ability to retrieve collocations from their memory. Most of the time, learners do not understand the fact that language does not consist of words but of chunks; therefore they do not pay attention to stored word combinations in their memory. Failure in searching for the proper collocations when they communicate is the result of this process.

On the occasions when EFL learners fail to find stored collocations, they try to transfer the concept word-by-word from the L1 to the L2. This strategy is referred to as **Literal translation** and is used to produce either acceptable or unacceptable collocations.

The process of paraphrasing a concept from the L1 to the L2 is called **approximate translation**. This happens when EFL learners use their intuition to make collocations of their own.

EFL learners tend to use**de-lexicalized verbs** like "do", "make", "take" and "keep" carelessly and replace them with each other in their production skills. Because of lack of linguistic knowledge, EFL learners may assume de-lexicalized verbs are words that have no or little meaning outside the context of certain use.

When EFL learners face collocations that they are not able to specify, they start **using synonyms** to solve lexical problems. Mostly, they produce the wrong combination because of insufficient collocation information of the synonyms.

Appeal the authority is when EFL learners ask a native speaker or use a dictionary when they cannot find the right collocation.

Appeal for assistance happens when EFL learners tend to find other people for assistance and instruction.

All the above studies emphasize the importance of teaching lexical collocations to increase the storage of collocations in the mental lexicon of EFL learners to improve the production of correct collocations. If collocations are not taught and studied, a large set of items are ignored in language learning that express complicated ideas simply and precisely. Furthermore, the fewer collocations students are able to use, the more they need to use longer expressions with more grammar to communicate; something that a native speaker can do with a precise lexical phrase and correspondingly little grammar. In order to develop strategies for learning and teaching purposes, collocations should be studied by language teachers to provide a more fruitful learning and teaching environment both for themselves and the learners, because there is a close connection between the knowledge of collocations and the strategy that the student develops in order to learn. Therefore, collocation instruction is able to assist EFL learners' collocation acquisition; learners also approve the usefulness and convenience of instruction. Since students' performance was different in terms of different collocation type, teachers might pay attention to different material design. Meanwhile, suitable guidance and carefully planned activities would facilitate collocation learning. To expand this discussion, the next section is concerned with an overview of some collocation teaching methods.

2.5. Teaching Methods for collocations

In this section, I will argue for the advantage of some methods of teaching collocations, and provide relevan examples. As mentioned above, collocations come in different forms; thus, some teaching methods and learning activities are more suited to teach specific kinds of collocations.

2.5.1. Deliberate learning of new collocations

Channell (1981) was one of the first researchers who recommended the teaching of collocations. She found that EFL learners could not realize the potential of known words as they only used them in a limited number of collocations that they feel sure of. Chanell (1981) stated that it is necessary to expose EFL learners to a large variety of collocations when a word is first acquired to prevail over the limited use of collocations. This could be done by using examples, sentences or collocation grids like the one below (Channell, 1981, p.120):

	Handsome	Pretty	Charming	Lovely
Woman		+	+	+
Child		+	+	+
Dog		+		+
Bird		+		+
Flower		+		+
Weather				+
Landscape		+		+
View		+		+
House		+	+	+
Furniture	+			+
Bed		+		+
Picture		+		+
Dress		+	+	+
Present	+			+
Voice			+	

Grids are a useful way to present many adjective + noun and verb + noun combinations. However, Nesslhauf (2005, p.269) claims that grids are limited in their effectiveness as they only provide information on the form, not the usage of collocations. She argues that knowledge of all aspects of usage like pragmatics, semantics, prosody and stylistics can only be learned in typical contexts. However, Carter (1998, p.217) states that teachers sensitive to teaching vocabulary in context will not present the grids as immutable, but rather as the hypotheses that learners can test against further data. In this regard, it is important to be aware of the limitations of grids and to use them properly in conjunction with the other learning activities.

2.5.2. Corpus and concordances

Fox (1998), Willis (1998) and Shin & Nation (2007) argue that it is necessary to use spoken language to choose which collocations to teach. Fox (1998) maintains that the ten million words which are found in the spoken section of the British National Corpus (BNC) could be considered as a source for the most common patterns of spoken collocations. But language changes overtime and this could cause some problems because the collocations might change significantly within years, resulting in a need to repeatedly update the list. Additionally, Fox (1998) discusses that words need to be taught based on their absolute frequency. He believes that it is not the only criteria but it will help teachers concentrate on the most important and common words. If EFL teachers know the less frequent collocations, they will not waste time on teaching them. Fox claimed that teachers should give EFL learners useful strategies to cope with collocations and "concordance" is one of those strategies (Fox, 1998). Koosha & Jafarpour (2006) explain concordance as a method of analyzing language by studying constructions and lexical patterns found in digital database. This strategy could help EFL learners identify collocations in different contexts and the way that native speakers use them. Willis (1998) highlights the importance of concordances to improve learners' skills to write and speak fluently, especially these days, as most of them have access to electronic databases. This activity could be more effective for teaching verb + noun collocations.

2.5.3. Dictionaries

Collocation dictionaries are another source of data, but one that is more efficient for proficient learners. This could be an independent learning strategy to improve the collocation knowledge of learners. For instance, if a learner has a problem dealing with the phrase "she's made a fool of you", he/she could look at the entry for "fool" in an English-English dictionary (Fox, 1998, p.82). The information belowis taken from the Collins COBUILD Advanced Learner's English Dictionaries (2006) for "fool":

If you "make a fool of" someone, you make them seem silly by telling people about something stupid that they have done, or by tricking them. "Your brother is making a fool of you"

This kind of information provides some benefits for EFL learners. The contextual information that they get from the expression helps them understand it better and provides them with the degree of limitation in usage. Furthermore, "more fool you", "act the fool" and "play the fool" are examples of the other expressions using "fool" in this particular dictionary which provide more learning opportunities for advanced learners. The responsibility of the

teacher is to show the learners a systematic way of recording the information they receive to achieve more knowledge from using dictionaries. In this way, EFL learners are capable of exploring collocation independently and improve their knowledge in this field outside the classroom as well (Fox, 1998).

2.5.4. Collocations in texts

Texts in newspapers or magazines can be a reliable source for teachers. These could be used to specify suitable ways of combining words. The text below from the Times newspaper demonstrate this method clearly: " The figures, coming after a surprise fall to 51.8 in November, suggest Britain's economy ended the year on a strong footing and will boost expectations that the country emerged from recession in the fourth quarter with positive GDP growth". Some adjectives such as surprise, strong, boost and positive can be highlighted by teachers. EFL learners can use dictionaries to find and create other possible collocations (Fox, 1998, p.85).

2.5.5. Input enhancement and learning collocations

According to Khanchobani (2012), visual input enhancement is an effective way of drawing learners' attention to formal aspects of language. This method is an implied means to develop the perceptual salience of the target forms through different typographical techniques like bolding, underlining and highlighting. Thus, input enhancement maintains the message, while the intended language features are focused (Khanchobani, 2012). This method is approved by some researchers like Doughty (1991), Shook (1994), Alanen (1995), Williams (1999) and Gharaee (2002). This method is more effective for the acquisition of grammatical collocations (Rezvani, 2011).

2.5.6. Output tasks and learning collocations

The word "output" is equivalent with what EFL learners has learned, and was referred to as the outcome or product of the language acquisition process in the 1980s (Rezvani, 2011). But Swain (1985, 1995, 2000, 2005) argues that "output" has come to be considered an important factor for improving L2 learning, not as an end product of learning. In fact, the processing of target language gives EFL learners an opportunity for a level of processing that may be required for increasing target-like proficiency and accuracy. According to this hypothesis, even as EFL learners try to produce the target language, they may understand that they do not know how to write or say exactly the meaning they wish to transfer. This motivates EFL

learners to recognize some of their linguistic difficulties consciously and pay attention to solutions about their linguistic deficiency (Swain, 1985, 1995, 2000, 2005). Rezvani (2011) studied in this regard and indicated that output tasks are a good method for acquisition of grammatical collocations by Iranian EFL learners.

2.5.7. Implications of the lexical approach for teaching collocations

Channel (1981) believes the lack of emphasis on vocabulary in syllabi is the main reason for most learners' errors. It is a fact that syllabi cover the grammar more than vocabulary.This prevents EFL learners from making the correct choice when it comes to creating collocations. Lewis (1997, p.34) argues that the lexical approach is based on perceiving a language as "holistic-organic". Thus, one major principle of the lexical approach is that "language consists of grammaticalized lexis, not lexicalized grammar". This means that language consists of chunks, not individual words, and collocations are assumed as a central idea of the lexical approach in linguistic. Lewis (1997) provides two reasons for teaching words with other partner-words instead of teaching individual vocabulary. The first reason states that vocabularies do not usually occur as single words in texts, but in connection with other words, and this makes it hard to teach the related patterns that a single word may take. The second reason is that it is easier to teach the language as a wholeand then break it down to basic components instead of teaching individual words and asking learners to construct sentences (Lewis, 1997).

The result of the above studies suggests that collocations certainly deserve the attention of linguists and language teachers, and shows that the development of efficient teaching methods could play an important role in acquiring collocations.

Chapter 3
Methodology

   This chapter deals with the methodological aspects of the present study. It begins by introducing the main research questions. Then, there is a brief account of the participants' background and the method used for data collection. The collocation knowledge of EFL laerners was tested using a multiple choice test while a Michigan proficiency test was used to determine their language proficiency. Next, the procedures for data collection are reported which include sequence and time allocated for each instrument. Finally it provides a description of the statistical methods used to analyze the quantitative and qualitative data analysis.

3.1. Research questions

   Collocations are one of the challenges that second language learners have to deal with in their journey of English language learning. They often come across many difficulties in all language skills. These difficulties vary in their intensity and nature depending on a variety of variables such as the students' background, age, personality, and native language (L1). A number of studies have argued that there is a relationship between language proficiency and collocation knowledge and claim that there is a high correlation between language proficiency and the collocation knowledge of EFL learner. In addition, Bahns & Eldaw (1993), based on the results of their own studies, argue that EFL learners have more problems with lexical collocations thanwith grammatical ones.Biskup (1992) and Gitsaki (1999) found that, in EFL, collocations that had equivalents in the students' L1 were easier, and therefore were more likely to be evoked than the ones having no equivalents in the students' L1. For this reason, they suggested that, since there is a large number of collocations that need to be acquired, the intentional teaching of collocations should be limited to collocations that have no equivalent in the students' first language. As a result, when the students did not know a particular collocation, they transferred collocations from their L1 in an incorrect way. Another source of difficulty is the cultural factor. Culture and vocabulary are related in any language. Culture is described by language, and no expression of culture can happen without language. In fact, the culture of a language is transmitted from generation to generation by language, Therefore,

learning word combinations is also learning culture. So, the focus of this study is on the following questions:

- Research question 1: Is there any correlation between language proficiency and the knowledge of collocation of second language learners?

- Research question 2: Is there any L1 influence on the production of L2 collocation of second language learners (negative and positive transfer)?

3.2. Research type and design

This Thesis can be regarded as a quantitative research. Quantitative research cares about measuring relationships between available variables. This type of research places more emphases on collecting data in the form of numbers. It is also experimental research in the sense that it tests participants to measure their variables. Besides, to explain the relationships between the data variables, this thesis uses a correlation formula. Regarding the first research question, I try to find weather English proficiency affects the English language learners' performance on a collocation test. First, I measure the proficiency of the subjects in English as their second language. The outcome will be a collection of numbers. Next, I correlate them with the average score on the collocation test by the respondent. The final result shows how the two variables go together positively or negatively based on raw scores by the Pearson correlation test. Regarding the second research question, I measure the frequency of correct and incorrect use of collocations by subjects in both lexical and grammatical types first. Then, I find the frequency of L1 influence on correct and incorrect collocations.

3.3. Participants

Around 60 students (male and female) from Roudehen Azad University majoring in English language teaching in their 4th semester of a B.A program of 2014/2015 were the participants.Their age ranged from 19 to 30. All of the students speak Farsi as their native language and learn English as a foreign language. Reason behind picking this population is that all students from this department should have good achievement in acquiring English skills as foreign language. A random sampling technique was used to choose the subjects with the purpose to make this research as representative as it can since everyone share similar chance to be sample.

3.4. Context of the study

Although English is a foreign language in Iran, it has been officially integrated into the educational system, especially at high-school levels. The ministry of education has increasingly taken actions over the years to strengthen the role of English at higher educational levels by including it into the curriculum of undergraduate programs. There are different kinds of universities in Iran, specifically Governmental, Azad and PayamNour. In recent years, Azad universitywhich is a private one, has largely developed its branches throughout the country and it can be mentioned that each city in Iran has at least one branch of this university, offering different majors for different interests. The students who participated in this study were studying English language teaching in Roudehen Azad University and have upper intermediate to advanced English background knowledge.

3.5. Instruments

EFL learners' familiarity with collocations has been studied on both the productive level (Bonk 2000, Gitsaki 1999) and the receptive level (Gyllstad 2007, Keshavarz & Salimi 2007) by means of collocation tests. Several efforts to TEST collocations have recently been made. Gyllstad (2007) groups them into corpus-driven studies and experimental studies. The former analyses learners' essays in corpora and tries to make inventories of and categorizes the errors produced by these learners (cf. Cowie 1998a, Howarth 1998, Granger 1998, Nesselhauf 2005, Laufer & Waldman 2011). A common result of these investigations is that collocations cause difficulties for L2 learners even at an advanced level, and most errors are related to first-language (L1) transfer (Laufer and Waldman 2011, Nesselhauf 2005). On the other hand, experimental studies consist of both receptive and productive tests which measure how well learners perform. Gitsaki (1999), Bonk (2000) and Eyckmans et al. (2004) are examples of studies that tested learner's productive knowledge of collocations. A common observation of these studies is that collocations develop in correlation with overall proficiency. The above studies have analyzed the relationship between possessing knowledge of collocations and overall proficiency. They have also investigated different types of collocation errors.

Different methods are generally used to measure the collocation knowledge of second language learners. Among these, essay writing tests, translation tests and multiple choice tests are more practical and effective. Essay writing tasks provide evidence of accurate free production of collocations, while translation and multiple choice tests measure accuracy in the subjects' knowledge of collocations in cued production tasks. Below, I will consider each of these test types.

Essay writing test

   The first type of collocation test is an essay writing task measuring the free production of collocations. The students are asked to write an essay of approximately 200 words on a given topic. The topic for each group is given both in Farsi and English. The topics below are given from the essay writing section of International English Language Testing System (IELTS) test:

۱- اگر قادر بودید دوباره زندگی کنید ، آیا تغییری در نحوه زندگی خود می دادید؟

If you could start your life again, would you do anything differently?

۲-در ده سال آینده خود را در چه جایگاهی می بینید؟

Where do you see yourself in ten years time?

۳- هر یک از اعضای خانواده خود را چگونه توصیف می کنید ؟

If you are asked to talk about your family, how would you describe each member?

۴- نحوه ازدواج در طی سالیان اخیر چه تغییری کرده است ؟

How have weddings changed in recent years?

۵.-بهترین جایی را که تا بحال بوده اید توصیف کنید .

Describe the best place you have ever been.

Translation test

   The second type of test consists of a translation task. The translation test measures cued production of collocations. The subjects are asked to translate Farsi sentences into English. Each sentence tests one collocation. Each collocation included in the test is different from its Farsi equivalent; for example:

۶ .من سالاد را تزیین کردم

English: I **dressed a salad**.
Farsi: I **decorated a salad**.

۷.پدرم همیشه به قول خود عمل می کند

English: My father always **keeps his promise**.
Farsi: My father always **operates his promise**.

۸.وقتی سر کار بودم، همسایه ام برایم پیغام گذاشت

English: When I was at work, my neighbor **left a message** for me.

Farsi: When I was at work, my neighbor **put a message** for me.

Multiple choice test

   In a multiple choice test, there are a number of sentences in English, containing collocations in context. These tests measure cued production of collocations. In this kind of test, each sentence contains one collocation. In each sentence, one part of the collocation is replaced by a blank and students are asked to read the sentence and choose one suitable word for each blank. As with the translation test, the collocations in the multiple choice test are different from their Farsi equivalents. Here is an example of this type:

9. This **color** ----- so wash the shirt separately.

a) Stretches   b) runs   c) spreads   d) extends

   The collocate pair targeted in the example above is **color runs**. Farsi native speakers are expected to choose **spreads** as the correct answer because of negative transfer from the L1 to the L2. Farghal&Obiedat (1995) found that the use of L1 transfer and synonymy was the most frequently used strategy when a correct collocation was not produced.These errors occur because EFL learners are not made aware of collocations as a fundamental genre of multi-word units.

   Multiple-choice items are the most popular item types in language testing. They are quick to administer, easy to score, can be applied to a large number of students in a short time, and are highly reliable.

   The Michigan proficiency test and the collocation test are the data gathering instruments that were used in this thesis. I used multiple choice in both tests to measure the proficiency level and the collocation knowledge of the EFL learners. It should be noted that the instruments were administered in the order they are described in the following subsections. Furthermore, the complete versions of both tests are provided in Appendix 1 and 2.

3.5.1. The Michigan Proficiency test

   A short version of the Michigan proficiency test was chosen to evaluate the English proficiency of the participants. The test is for the certificate of proficiency in English (ECPE), which provides a measure in proficiency of English as a second language. When the test is passed, the certificate is awarded. This test battery was developed at the English Language Institute of the University of Michigan (ELIUM). This is a standard test applied once a year in 25 countries.

Those receiving an ELIUM Certificate would be expected to have language skills comparable to those receiving a certificate in Cambridge Proficiency of English (CPE). The short version of this test consists of 35 items which are incorporated in four sections. The first section is a cloze test. It is followed by a grammar test in section 2. Then a vocabulary test comes in the next section. A reading comprehension test is the final section in this test. Each blank has one grade so the maximum score is 35 items. (Briggs et al., 1997).

In the "cloze" test section, both the discourse level and the sentence level of language is tested. At the discourse level, examinees are expected to be able to understand the structure of the test and establish the author's intentions. At the sentence level, examinees need to analyze the syntax of sentences and to specify what part of speech (noun, verb, adverb, etc) the missing item is. Most of the answer choices are grammatically correct at the sentence level (phrase), but are pragmatically incorrect at the discourse level. Here are some examples:

In the US, industries that generate hazardous wastes want to dispose of them as cheaply as possible. Private companies hired to dispose of this waste compete with each other to offer the lowest prices to these industries. The government does not get involved, beyond setting minimum safety standards.

Unfortunately, the __(10)__ of companies that generate and dispose of waste is to save money, __(11)__ to guarantee safety.

10. a. solution   b. license   c. importance   d. goal
The correct answer is d.

11. a. not   b. just   c. besides   d. something
The correct answer is a.

In the "grammar" test section, all grammar items are of the sentence completion kind. Each item is one or two sentences with a blank in one of the sentences. The correct answer, which is the one that is grammatically correct in the context, must be selected from four answer choices. The following are some examples of this type:

12. "Who sent you the letter?"

"The university I graduated _____ last spring."

  a. of   b. by

  c. at   d. from

The correct answer is d.

13. "I found these books. Do you need them?"

  "Oh yes, those are the ones I _____earlier."

  a. was looking for them   b. looking for

The correct answer is d.

In the "vocabulary" test section, examinees should have sufficient control of the vocabulary in order to function in different contexts ranging from informal to formal. They should be made aware of the scope of vocabulary at proficiency level. Here are some examples:

14. Jones has _____ his job and will no longer be working here.

   a. abstained   b. disclosed

   c. expired   d. resigned

The correct answer is d.

15. He preferred a _____ life as an artist to a secure job in a blank.

   a. precarious   b. cordial

   c. complementary   d. precise

The correct answer is a.

In the "reading comprehension" test section, the length of the passage is approximately 250 words. Although the correct answer for some questions can be found in a particular sentence or phrase, for others information must be extracted from different parts of the text.

Since the Michigan proficiency test is considered a standard test which has an acceptable validity and reliability, a pilot study did not seem necessary for checking the validity of the instruments nor to decide on the time needed for participants to finish each section.

3.5.2. Collocation test

A multiple-choice test of collocation was administered to measure the students' collocation knowledge of English. The test consisted of 40 items which was made up of both lexical and grammatical collocations.

Lexical collocations were divided into "noun + verb" and "noun + noun".Examples of "noun + verb" type is provided below:

16. The **anniversary** of the founding of the charity ----- on the 12th of November.

a) falls   b) happens   c) turns up   d) takes place

The correct answer is **falls**. Farsi native speakers are expected to choose **takes place** as the correct answer because of negative transfer from the L1 to the L2. They usually translate the word directly from their L1 that is not the correct answer in English.

17. **Communication** between the two sides has -----

a) broken down   b) seized up   c) collapsed   d) failed

The correct answer is **broken down**. Farsi native speakers are expected to choose the same answer because of positive transfer from the L1 to the L2.

Next let us consider some examples of "noun + noun" collocations:

18. He suffered from severe**language** -------

a) failure   b) damage   c) impairment   d) weakness

In 18, the correct answer in 18 is **impairment**. Farsi native speakers are expected to choose **weakness** as the correct answer because of negative transfer from the L1 to the L2. They usually use a synonym directly from their L1 which is not the correct answer in English. Another example is provided in 19.

19. The value of the property almost doubled during the **interim**-------.

a) term   b) space   c) period   d) interval

Here the correct answer is **period**. Farsi native speakers are expected to choose the same answer because of positive transfer fromthe L1 to the L2.

Grammatical collocations are divided into "preposition + noun "and "noun + preposition". Below are some examples of "preposition + noun":

20. The prime Minister was ………..**fire**in parliament for his handling of the budget.

a) under   b) in   c) on   d) at

The correct answer is **under**. Farsi native speakers are expected to choose **in** as the correct answer because of negative transfer from the L1 to the L2. They usually translate the word directly from their L1,but this is not the correct answer in English. Another example of "preposition + noun "collocation is provided in 21:

21. If a liquid or a gas is kept ………… **pressure**, it is forced into a container so that when the container is opened, the liquid or gas escape quickly.

a) in   b) under   c) with   d) at

   The correct answer is **under**. Farsi native speakers are expected to choose the same answer because of positive transfer from the L1 to the L2.

   Finally let us consider some examples of "noun + preposition" collocation in 22 and 23:

22. I've always a certain **fondness** ………..her.

a) towards   b) for   c) of   d) in

   The correct answer is **for**. Farsi native speakers are expected to choose **towards** as the correct answer because of negative transfer from the L1 to the L2.

23. Nobody refused for **fear** ………..losing their job.

a) of   b) from   c) on   d) over

   In 23, the correct answer is **of**. Farsi native speakers are expected to choose the same answer because of positive transfer from L1 to L2.

   In the test, each section has 10 items. To ensure the reliability of my correction, both native speakers and dictionaries were consulted during the whole process. All the collocations were checked by a native speaker of (American) English to verify the correct formation of collocations for the test items. In addition, the "Longman Contemporary 5th Edition DVD-Rom" with 75000 collocations and "Oxford collocations dictionary for students of English" with its 170,000 collocation entries were used. It is worth mentioning that these two collocation dictionaries do not include free combinations and fixed idioms, as it is important to ensure that the focus is on collocations and not other kinds of word combinations. Only collocations found in at least one of the two dictionaries were counted for this study. Furthermore, "English Collocation in Use", which is a book including both grammatical and lexical collocations were used. This book is categorized by McCarthy & O' Dell (2005) and is the major book that was studied by EFL majors in Iranian universities. The focus of the book is on using collocations in different passages. As a result, it was not difficult to choose target collocation.

3.6. Data collection procedure and scoring

The data were collected in the winter 2015 by the researcher, who had previously obtained permission from the Head of the departments of humanities at the University of Roudehen. The number of students who were willing to participate in the study was 60.There was a coding procedure after the data collection. All the information was located into folders with an identifying number on each. To assure participants' anonymity, identifying numbers were used instead of names. In order to conduct the research and to reduce unwanted error variance caused by fatigue, the data collection was carried out in two separate sessions.

First, all the students took the Michigan proficiency test to determine their level of English proficiency. This test comprises 35 items and was divided into four parts. The first three parts consist of 10 multiple choice questions each to measure the grammar and vocabulary knowledge of the examinees. The last part included a reading comprehension task with 5 multiple choice questions. For test scoring, there was no problem of inter-rater reliability since items were designed in objective formats. The possible range of scores was from 0 to 35. Correct answers scored one point and incorrect answers scored zero. Items unanswered were counted as incorrect. The higher a student's score, the more proficient s/he would be rated.

Next, the students had to complete the Collocation test. This test consisted of 40 items in a multiple choice format. The combinations of "noun + noun" and "noun + verb" were chosen to be investigated from lexical collocations. From grammatical collocations, "preposition + noun" and "noun + preposition" were selected. There were 10 contexts in each combination section. The scores on the collocation test showed the participants' knowledge of collocations. The data set based on four sections was scored as correct or incorrect because all items allowed for only one possible answer. The maximum score for answering 40 questions correctly was 40 points. The students got one point for each question done correctly.

It is worth mentioning that before the administration of the above tests, the participants had some instructions about how to complete the test. They were also assured that the data would be treated confidentially and would not affect their course marks. During the administration phase of this study, some careful steps were taken. All examinees were tested on the same days together and were seated in a relaxed atmosphere to make the situation as stress-free as possible. They were encouraged to ask the researcher about anything unknown in the test they might find difficult to understand. So, the researcher explained any words unknown to the students, with care taken that the particular words were not giving away the answers to any of the test items. In terms of timing, students were allowed to complete the Michigan proficiency

test in 40 minutes and the collocation test in 60 minutes. Most of them were able to finish the tests before the allocated time, showing that the measures were correctly designed from a practical point of view. A full explanation of the data analysis and discussions about the results will be presented in the next chapter.

Chapter 4
Results and Statistical Analysis

4.1. Introduction

This chapter presents the data gathered, using the methodology described in the previous chapter. The quantitative data collected through the Michigan proficiency test and the collocation test scores of every student (female/male), were entered into the Pearson correlation package to get the following results.

4.2. Language proficiency and collocation scores

To answer the first research question, that is, whether there is a correlation between language proficiency and collocation knowledge, the subjects' score on the Michigan proficiency test, their scores on the collocation test, and the proportion of correct collocations were analyzed. In section 3.5.1, we saw that all the participants took the Michigan proficiency test to determine their level of English proficiency. This test comprises 35 items and is divided into four parts. The first three parts consist of 10 multiple-choice questions each to measure the grammar and vocabulary knowledge of the examinees. The last part included a reading comprehension task with 5 multiple-choice questions. The possible range of scores is from 0 to 35. Correct answers scored one point and incorrect answers scored zero. Items unanswered were counted as incorrect. The higher a student's score, the more proficient s/he would be rated.

Next, the students had to complete the Collocation test recall that this test consisted of 40 items in a multiple-choice format. The combinations of "noun + noun" and "noun + verb" were chosen to be investigated from lexical collocations. From grammatical collocations, "preposition + noun" and "noun + preposition" were selected. There were 10 questions for each combination section. The scores on the collocation test showed the participants' knowledge of collocations. The data set based on the four sections was scored as correct or incorrect because all items allowed for only one possible answer. The maximum score for answering 40 questions correctly was 40 points. The students got one point for each question done correctly.

Table 1 reveals the total number of correct answers for each EFL learner in Michigan proficiency test and collocation test:

Table 1: Correct answers in Michigan proficiency test and collocation test.

Subject number	Total correct answers in proficiency test (N=35)	Total correct answers in collocation test (N=40)	Subject number	Total correct answers in proficiency test (N=35)	Total correct answers in collocation test (N=40)
1	74.2% (26)	52.5% (21)	31	28.5% (10)	60% (24)
2	77.1% (27)	57.7% (23)	32	37.1% (13)	30% (12)
3	74.2% (26)	57.7% (23)	33	22.8% (8)	40% (16)
4	62.8 % (22)	57.7% (23)	34	35% (14)	40% (16)
5	51.4% (18)	62,5% (25)	35	37.1% (13)	62,5% (25)
6	34.2% (12)	35% (14)	36	31.4% (11)	50% (20)
7	54.2% (19)	77.5% (31)	37	28.5% (10)	35% (14)
8	68.5% (24)	47.5% (19)	38	22.8% (8)	32.5% (13)
9	74.2% (26)	82.5% (33)	39	54.2% (19)	65% (26)
10	48.5% (17)	45% (18)	40	31.4% (11)	50% (20)
11	74.2% (26)	22.5% (9)	41	25.7% (9)	30% (12)
12	65.7% (23)	30% (12)	42	51.4% (18)	40% (16)
13	60% (21)	37.5% (15)	43	20% (7)	35% (14)
14	88.5% (31)	72.5% (29)	44	34.2% (12)	45% (18)
15	65.7% (23)	35% (14)	45	17.1% (6)	30% (12)
16	35% (14)	45% (18)	46	11.4% (4)	30% (12)
17	48.5% (17)	52.5% (21)	47	48.5% (17)	32.5% (13)
18	68.5% (24)	60% (24)	48	128.5% (10)	42.5% (17)
19	68.5% (24)	52.5% (21)	49	31.4% (11)	42.5% (17)
20	34.2% (12)	35% (14)	50	51.4% (18)	35% (14)
21	40% (14)	57.7% (23)	51	45.7% (16)	42.5% (17)
22	34.2% (12)	37.5% (15)	52	34.2% (12)	40% (16)
23	31.4% (11)	47.5% (19)	53	31.4% (11)	35% (14)
24	45.7% (16)	72.5% (29)	54	22.8% (8)	52.5% (21)
25	48.5% (17)	42.5% (17)	55	25.7% (9)	45% (18)
26	14.2%(5)	35% (14)	56	48.5% (17)	42.5% (17)
27	34.2% (12)	55% (22)	57	74.2% (26)	60% (24)
28	8.5% (3)	35% (14)	58	37.1% (13)	40% (16)
29	37.1% (13)	37.5% (15)	59	34.2% (12)	57.7% (23)
30	37.1% (13)	60% (24)	60	34.2% (12)	22.5% (9)

The statistical measures based on the results in Table 1 show that there is a high correlation between the results in the proficiency test and the collocation test. To specify how strong this relationship is, a Pearson correlation is used. As illustrated by the scatter plot in Figure1 below, the relationship between these two variables is a completely linear one. Most of the points are around one line and the two variables are interrelated. The drawn line in this plot is the regression line which has the least square error. Pearson's R is the square root of the R^2 value (0.5115826).This line has the least errors and deviations among all possible lines. The

upward and positive slope indicates that when the percentage of an individual's proficiency score rises, the correct use of collocations increases as well.

Figure 1: correlation between collocation and language proficiency
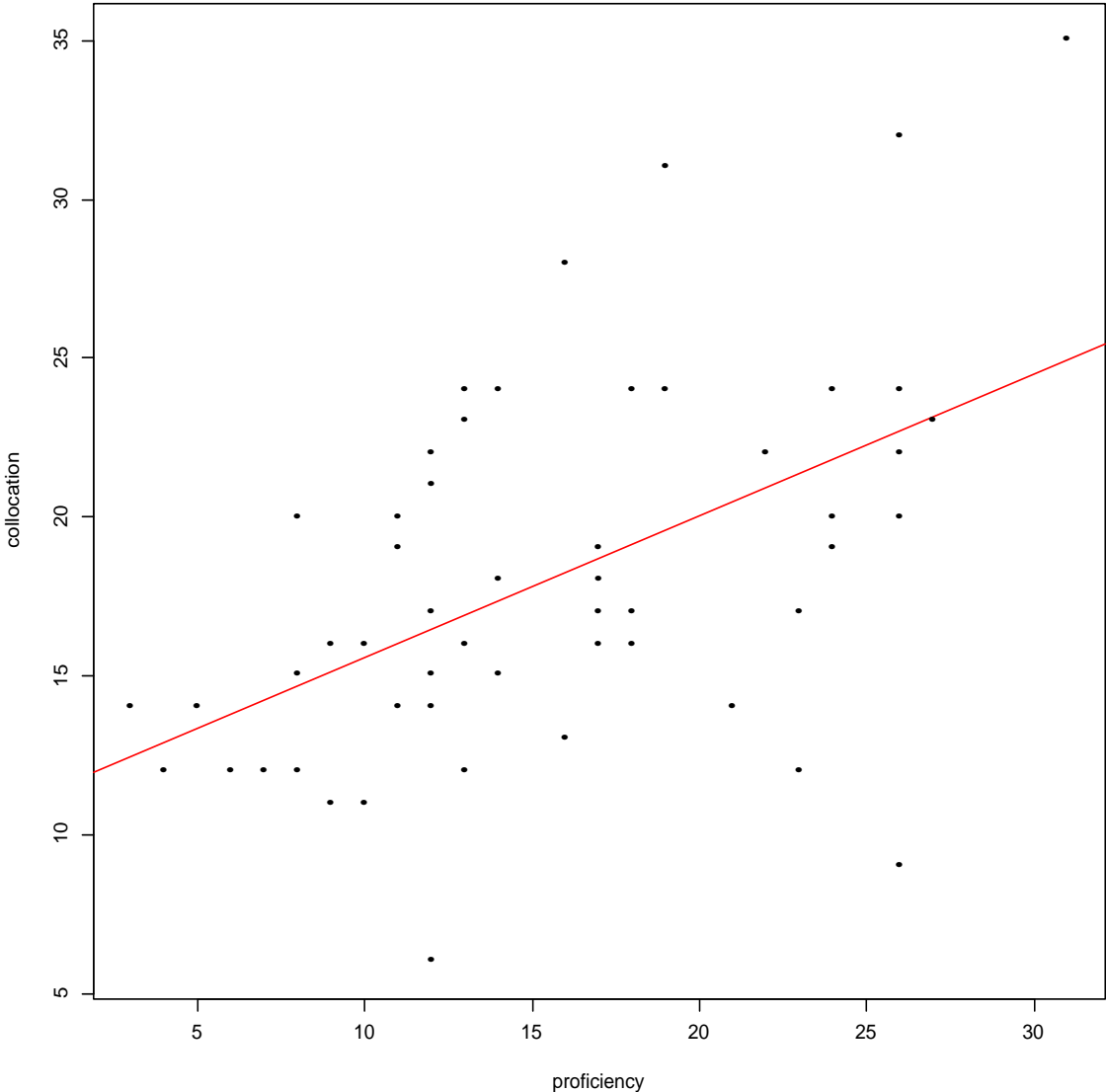
$P < 0.001$, R2 (r-squared): 0.262.

The following formula gives the estimated collocation score:

Collocation score = 11.1 + proficiency score * 0.45

The results of this investigation clearly show that there is a significant relationship between a subjects' language proficiency as measured by the Michigan proficiency test and their knowledge of collocations as measured by their performance on the collocation test. This

indicates that collocations are a good indicator of language proficiency. The results also support Zhang (1993) who found a moderate-to-strong correlation between the language proficiency of non-native speakers and their knowledge of collocations.

Let us now consider the correlation between language proficiency and the two types of collocations separately (lexical and grammatical). Recall that the collocation test consisted of 20 grammatical collocations, 10 Noun + Preposition collocations and 10 Preposition + Noun collocations.

Table 2 illustrates the total number of correct answers for each EFL learner in each sub-type of grammatical collocation test:
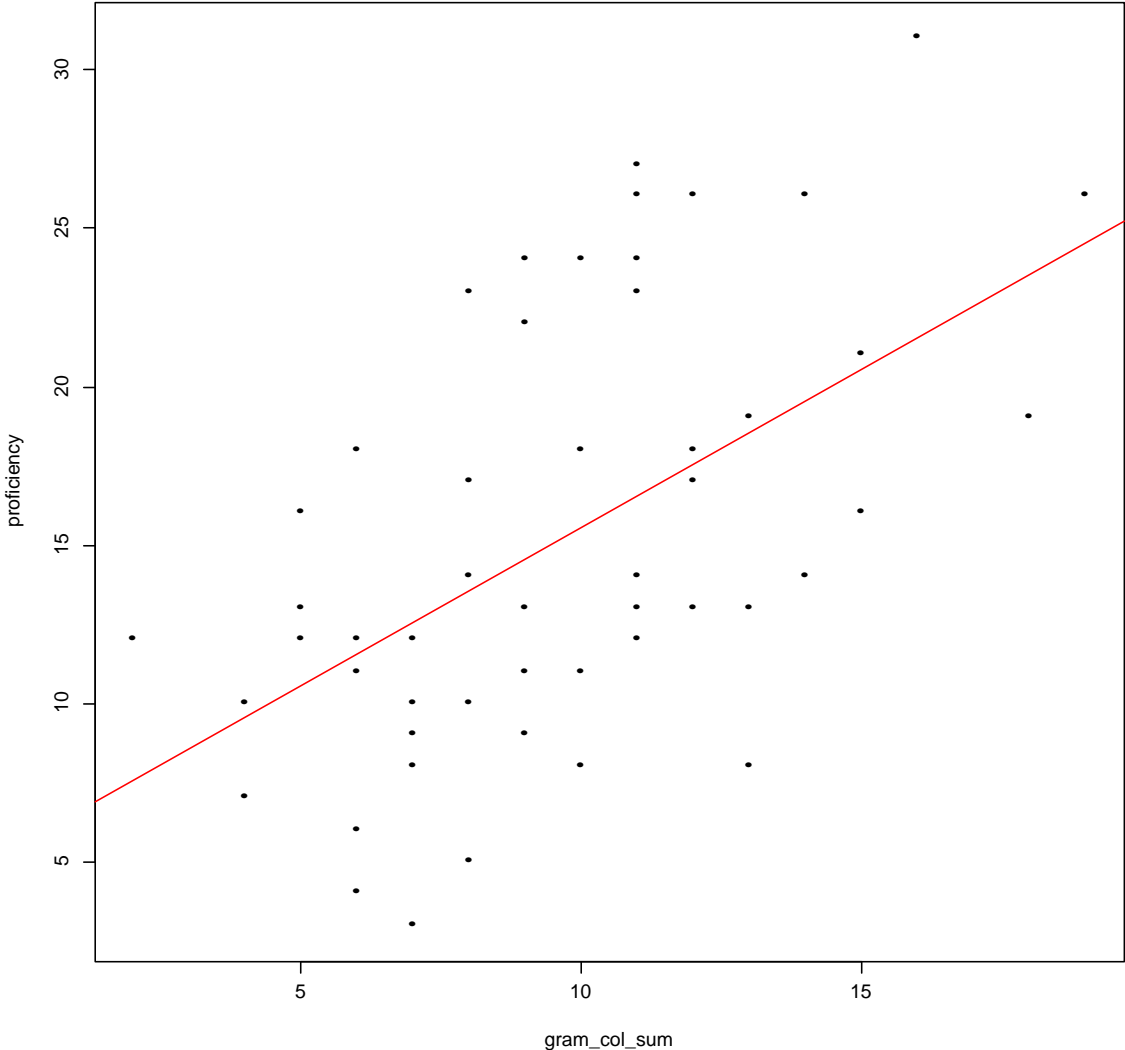
Table 2: Proficiency and grammatical collocation.

Subject number	Total correct answers in proficiency test (N=35)	Total correct answers in Preposition + Noun (N=10)	Total correct answers in Noun +Preposition (N=10)	Total correct answers in grammatical collocation (N=20)
1	74.2% (26)	40% (4)	70% (7)	55% (11)
2	77.1% (27)	70% (7)	50% (5)	60% (12)
3	74.2% (26)	90% (9)	60% (6)	75% (15)
4	62.8 % (22)	60% (6)	30% (3)	45% (9)
5	51.4% (18)	70% (7)	50% (5)	60% (12)
6	34.2% (12)	60% (6)	10% (1)	35% (7)
7	54.2% (19)	90% (9)	90% (9)	90% (18)
8	68.5% (24)	40% (4)	40% (4)	40% (8)
9	74.2% (26)	90% (9)	100% (10)	95% (19)
10	48.5% (17)	70% (7)	30% (3)	50% (10)
11	74.2% (26)	30% (3)	10% (1)	20% (4)
12	65.7% (23)	40% (4)	20% (2)	30% (6)
13	60% (21)	40% (4)	40% (4)	40% (8)
14	88.5% (31)	90% (9)	90% (9)	90% (18)
15	65.7% (23)	40% (4)	30% (3)	35% (7)
16	35% (14)	20% (2)	70% (7)	45% (9)
17	48.5% (17)	80% (8)	60% (6)	70% (14)
18	68.5% (24)	50% (5)	70% (7)	60% (12)
19	68.5% (24)	60% (6)	30% (3)	45% (9)
20	34.2% (12)	30% (3)	30% (3)	30% (6)
21	40% (14)	90% (9)	60% (6)	75% (15)
22	34.2% (12)	50% (5)	30% (3)	40% (8)
23	31.4% (11)	30% (3)	30% (3)	30% (6)
24	45.7% (16)	100% (10)	80% (8)	90% (18)
25	48.5% (17)	60% (6)	20% (2)	40% (8)
26	14.2%(5)	50% (5)	20% (2)	35% (7)
27	34.2% (12)	90% (9)	60% (6)	75% (15)
28	8.5% (3)	50% (5)	20% (2)	35% (7)
29	37.1% (13)	30% (3)	40% (4)	35% (7)
30	37.1% (13)	70% (7)	60% (6)	65% (13)

Subject Number	Total correct answers in proficiency test (N=35)	Total correct answers in Preposition + Noun (N=10)	Total correct answers in Noun +Preposition (N=10)	Total correct answers in grammatical collocation (N=20)
31	28.5% (10)	60% (6)	60% (6)	60% (12)
32	37.1% (13)	60% (6)	20% (2)	40% (8)
33	22.8% (8)	50% (5)	10% (1)	30% (6)
34	35% (14)	80% (8)	30% (3)	55% (11)
35	37.1% (13)	100% (10)	40% (4)	70% (14)
36	31.4% (11)	50% (5)	40% (4)	45% (9)
37	28.5% (10)	50% (5)	10% (1)	30% (6)
38	22.8% (8)	40% (4)	20% (2)	30% (6)
39	54.2% (19)	40% (4)	30% (3)	35% (7)
40	31.4% (11)	50% (5)	70% (7)	60% (12)
41	25.7% (9)	40% (4)	30% (3)	35% (7)
42	51.4% (18)	50% (5)	50% (5)	50% (10)
43	20% (7)	20% (2)	30% (3)	25% (5)
44	34.2% (12)	70% (7)	40% (4)	55% (11)
45	17.1% (6)	20% (2)	40% (4)	30% (6)
46	11.4% (4)	20% (2)	40% (4)	30% (6)
47	48.5% (17)	40% (4)	30% (3)	35% (7)
48	128.5% (10)	50% (5)	30% (3)	40% (8)
49	31.4% (11)	60% (6)	10% (1)	35% (7)
50	51.4% (18)	20% (2)	20% (2)	20% (4)
51	45.7% (16)	20% (2)	30% (3)	25% (5)
52	34.2% (12)	40% (4)	30% (3)	35% (7)
53	31.4% (11)	50% (5)	50% (5)	50% (10)
54	22.8% (8)	50% (5)	90% (9)	70% (14)
55	25.7% (9)	60% (6)	40% (4)	50% (10)
56	48.5% (17)	50% (5)	30% (3)	40% (8)
57	74.2% (26)	60% (6)	60% (6)	60% (12)
58	37.1% (13)	50% (5)	40% (4)	45% (9)
59	34.2% (12)	80% (8)	40% (4)	60% (12)
60	34.2% (12)	40% (4)	10% (1)	25% (5)

The information in Table 2 is the basis of the scattered plot in Figure 2 below. This figure shows the correlation between the language proficiency of Iranian EFL learners and how target-like they are with grammatical collocations. The plot reveals that there is a significant correlation between these two variables and the slope is positive. The more proficient the subjects are, the more successfully they are with grammatical collocations.

Figure 2: Correlation between language proficiency and grammatical collocations

Multiple R-squared: 0.2731, Adjusted R-squared: 0.2605 P-value: 1.846e-05

   Table 3 demonstrates the total number of correct answers for each EFL learner in the two sub-types of lexical collocations tested, Noun + Noun and Noun + Verb collocations.
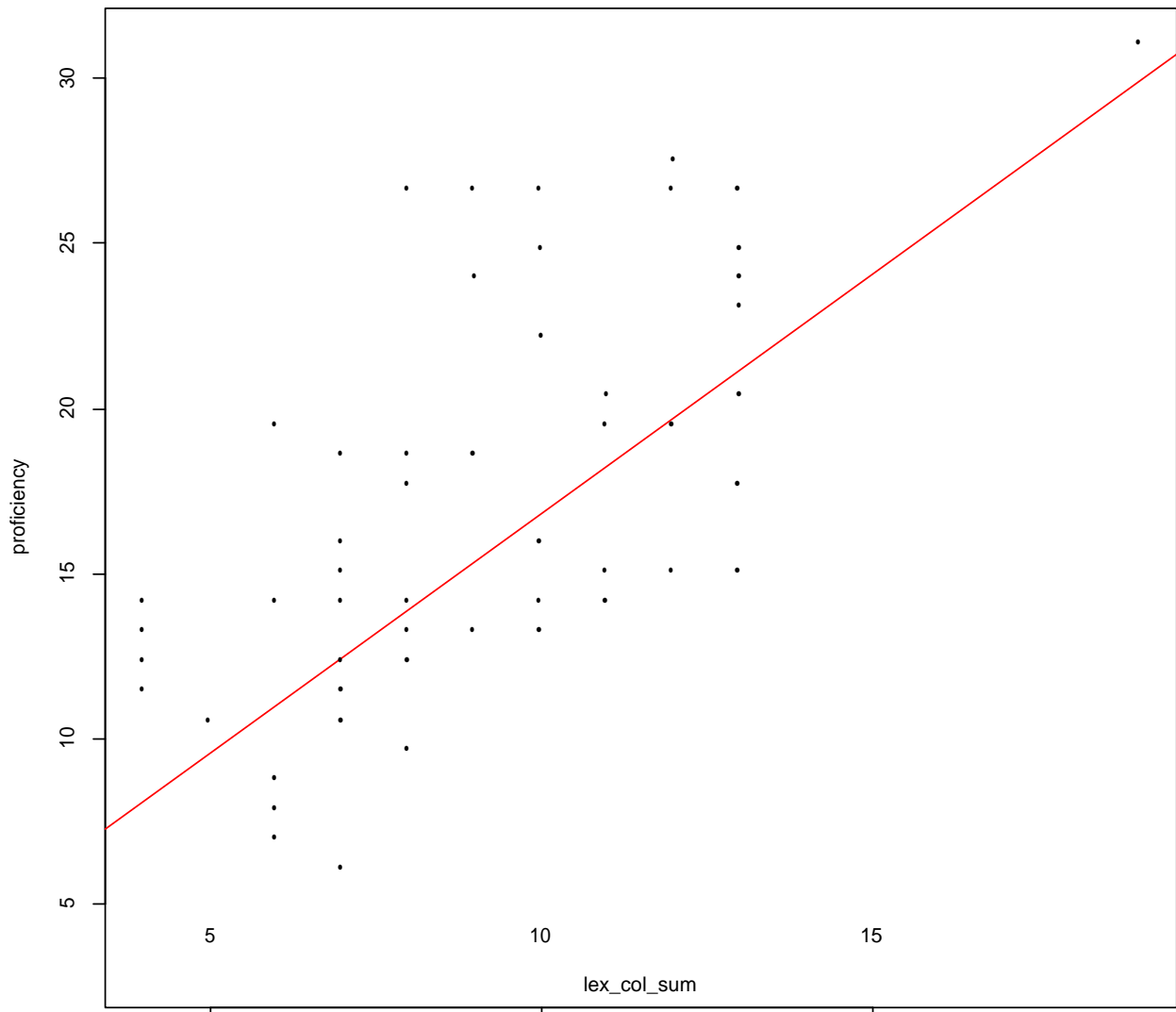
Table 3: Proficiency and lexical collocation

Subject number	Total correct answers in Proficiency test (N=35)	Total correct answers in Noun + Noun (N=10)	Total correct answers in Noun + Verb (N=10)	Total correct answers in lexical collocation (N=20)
1	74.2% (26)	60% (6)	40% 94)	50% (10)
2	77.1% (27)	60% (6)	50% (5)	55% (11)
3	74.2% (26)	50% (5)	30% (3)	40% (8)
4	62.8 % (22)	80% (8)	60% (6)	70% (14)
5	51.4% (18)	80% (8)	50% (5)	65% (13)
6	34.2% (12)	40% (4)	30% (3)	35% (7)
7	54.2% (19)	50% (5)	80% (8)	65% (13)
8	68.5% (24)	60% (6)	50% (5)	55% (11)
9	74.2% (26)	60% (6)	80% (8)	70% (14)
10	48.5% (17)	40% (4)	40% (4)	40% (8)
11	74.2% (26)	40% (4)	10% (1)	25% (5)
12	65.7% (23)	40% (4)	20% (2)	30% (6)
13	60% (21)	40% (4)	30% (3)	35% (7)
14	88.5% (31)	50% (5)	60% (6)	55% (11)
15	65.7% (23)	40% (4)	50% (5)	45% (9)
16	35% (14)	40% (4)	50% (5)	45% (9)
17	48.5% (17)	50% (5)	20% (2)	35% (7)
18	68.5% (24)	70% (7)	50% (5)	60% (12)
19	68.5% (24)	70% (7)	50% (5)	60% (12)
20	34.2% (12)	70% (7)	10% (1)	40% (8)
21	40% (14)	40% (4)	40% (4)	40% (8)
22	34.2% (12)	50% (5)	20% (2)	35% (7)
23	31.4% (11)	70% (7)	60% (6)	65% (13)
24	45.7% (16)	50% (5)	60% (6)	55% (11)
25	48.5% (17)	50% (5)	40% (4)	45% (9)
26	14.2%(5)	40% (4)	30% (3)	35% (7)
27	34.2% (12)	40% (4)	30% (3)	35% (7)
28	8.5% (3)	50% (5)	20% (2)	35% (7)
29	37.1% (13)	60% (6)	20% (2)	40% (8)
30	37.1% (13)	60% (6)	50% (5)	55% (11)
31	28.5% (10)	70% (7)	50% (5)	60% (12)
32	37.1% (13)	30% (3)	10% (1)	20% (4)
33	22.8% (8)	40% (4)	60% (6)	50% (10)
34	35% (14)	20% (2)	30% (3)	25% (5)
35	37.1% (13)	40% (4)	70% (7)	55% (11)
36	31.4% (11)	50% (5)	60% (6)	55% (11)
37	28.5% (10)	20% (2)	60% (6)	40% (8)
38	22.8% (8)	30% (3)	40% (4)	35% (7)
39	54.2% (19)	90% (9)	100% (10)	95% (19)
40	31.4% (11)	50% (5)	30% (3)	40% (8)
41	25.7% (9)	30% (3)	20% (2)	25% (5)
42	51.4% (18)	40% (4)	20% (2)	30% (6)
43	20% (7)	60% (6)	30% (3)	45% (9)

Subject Number	Total correct answers in Proficiency test (N=35)	Total correct answers in Noun + Noun (N=10)	Total correct answers in Noun + Verb (N=10)	Total correct answers in lexical collocation (N=20)
44	34.2% (12)	50% (5)	20% (2)	35% (7)
45	17.1% (6)	50% (5)	10% (1)	30% (6)
46	11.4% (4)	50% (5)	10% (1)	30% (6)
47	48.5% (17)	30% (3)	30% (3)	30% (6)
48	28.5% (10)	60% (6)	30% (3)	45% (9)
49	31.4% (11)	50% (5)	50% (5)	50% (10)
50	51.4% (18)	40% (4)	60% (6)	50% (10)
51	45.7% (16)	60% (6)	60% (6)	60% (12)
52	34.2% (12)	50% (5)	40% (4)	45% (9)
53	31.4% (11)	30% (3)	10% (1)	20% (4)
54	22.8% (8)	10% (1)	60% (6)	35% (7)
55	25.7% (9)	30% (3)	50% (5)	40% (8)
56	48.5% (17)	60% (6)	30% (3)	45% (9)
57	74.2% (26)	60% (6)	60% (6)	60% (12)
58	37.1% (13)	40% (4)	30% (3)	35% (7)
59	34.2% (12)	60% (6)	50% (5)	55% (11)
60	34.2% (12)	20% (2)	20% (2)	20% (4)

According to the information in Table 3, the correlation between language proficiency of Iranian EFL learners and lexical collocations is shown in Figure 3 below. As is clear from the plot, the variables have a positive relationship and the correlation is considerable.

Figure 3: correlation between language proficiency and lexical collocation

Multiple R-squared: 0.4172, Adjusted R-squared: 0.4071 p-value: 2.509e-08

By comparing Figure 2 and 3, we can see that there is a high correlation between the language proficiency of Iranian EFL learners and both lexical and grammatical collocations. This means that EFL learners with a higher language proficiency perform better in both lexical and grammatical collocations. However, although both scatter plots in Figure 2 and 3 are linear, the correlation is stronger for the lexical collocations. The dots in plot in Figure 2 are spread around the line while they are more concentrated in plot in Figure 3. This confirms that the relationship between language proficiency and lexical collocations is stronger than the relationship between proficiency and grammatical collocation.

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4.3. Distribution of errors across collocation sub-types

In section 2.4, we discussed different causes of collocation errors such as transfer, overgeneralization, word coinage, use of synonyms, etc. Section 2.5 argued for some useful methods for teaching collocations. First of all, however, teachers need to know what types of collocations are more difficult for EFL learners. Once they know this, they can focus more on those types and find better teaching methods to help the students improve their proficiency, and the correct use of collocations. Here, I discuss the distribution of correct answers between the four categories of collocations to determine which collocation types and sub-types are more problematic for Iranian EFL students.

Let us start, however, by explaining what the total is. As we have seen in this chapter, the participants of the current study were asked to pick the correct collocation in 40 contexts. As there were a total of 60 participants, a total of 2400 answers were given in the study. Of these 2400 answers, 1107 were correct answers. Now we will consider how the correct answers are distributed among the different types of collocations.

Table 4 shows that lexical collocations are more difficult than grammatical collocations for EFL students. The proportion of correct answers in lexical collocations is 48.32% while it is 51.68% in grammatical collocations. It also shows that some kinds of collocations have broader differences in the level of difficulty. There is a statistically significant difference between the performance of the subjects on Preposition + Noun collocations and other types of collocations. The proportion of correct answers for Preposition + Noun is 325/1107, whereas the proportion of correct answers for Noun + Verb is 243/1107, the proportion of correct answers for Noun + Preposition is 247/1107 and the proportion of correct answers for Noun + Noun is 292/1107. In addition, it demonstrates that Noun + Verb collocations and Noun + Preposition collocations are the most difficult ones for the students while, on the other hand, Noun + Noun collocations and preposition + Noun are the easiest types for the subjects.

Table 4: The distribution of correct answers across the collocation sub-types

Collocation type	Collocation sub-type	Number of correct answers	Percent of correct answers %	Total percentage of correct answers %
Lexical	Noun + Noun	292	26.37 % (292/1107)	48.32 %
	Noun + Verb	243	21.95% (243/1107)	
Grammatical	Preposition + Noun	325	29.35% (325/1107)	51.68 %
	Noun + Preposition	247	22.33 % (247/1107)	
	Total	1107	100 %	100 %

Based on the current study, the continuum from the easiest to the most difficult ones seems to be:

Preposition + Noun > Noun + Noun >Noun + Preposition >Noun + Verb

The distribution of correct answers among these categories is illustrated in Figure 4 below:

Figure 4: Distribution of correct answers across the collocation sub-types
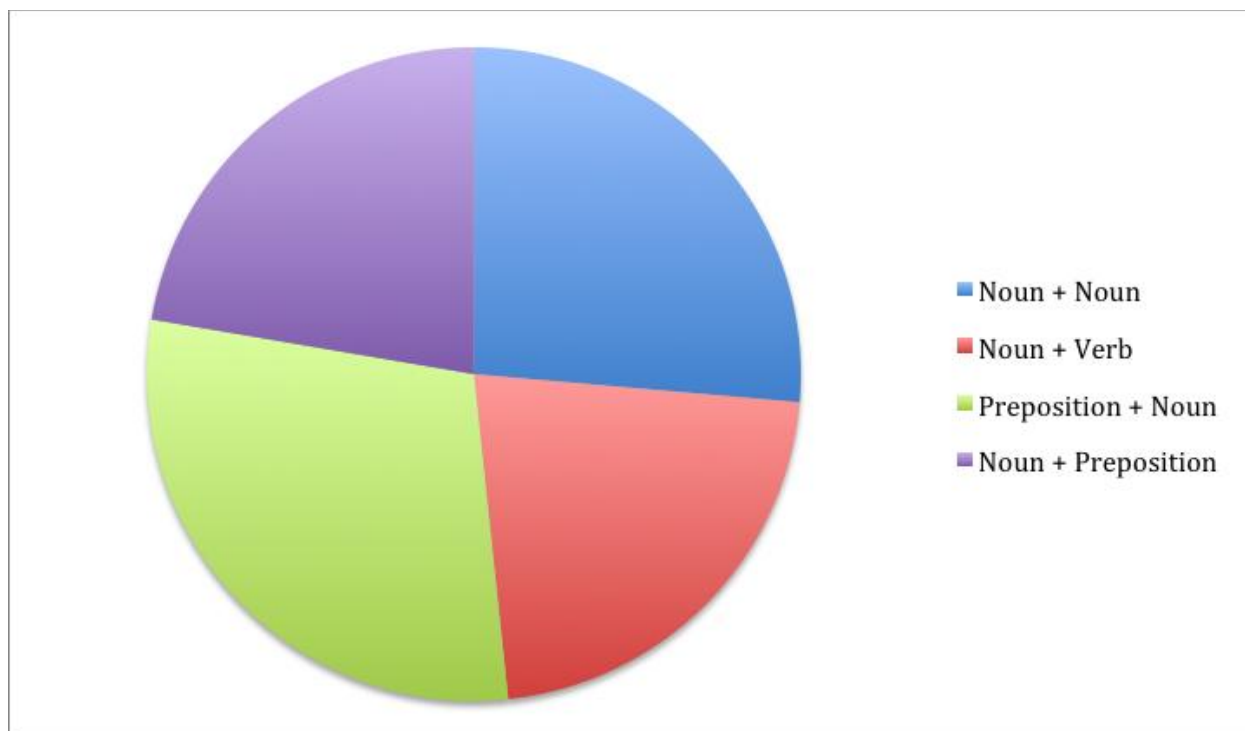
4.4. Proportion of positive and negative transfer in collocation test

Recall that the goals of the current thesis were to determine (i) whether there is any correlation between language proficiency and the knowledge of collocations of second language learners, and (ii) whether there is any L1 influence on the production of L2 collocation of second language learners (negative and positive transfer).

Based on the collocation test, the expected proportion of positive and negative transfer in all four sub-types of collocations are as below in Table 5. It is important to mention that 6 out of 10 items in Noun + Noun collocations were designed for positive transfer and 4 out of 10 for negative transfer. In Noun + Verb collocations, the proportion of positive and negative transfers were equal (5). In Noun + Preposition, the proportion of positive to negative transfer was 6 to 4 out of 10. 7 items out of 10 in Preposition + Noun were designed for positive transfer and 3 out of 10 for negative transfer. "Other" column in table 5, 6 and 7 shows that in each item, there are 3 other possible choices that do not include positive /negative transfer.

Table 5: Proportion of positive and negative transfer in collocation test

Collocation types	Positive transfer	Negative transfer	Other
Noun + Noun	6	4	10
Noun + Verb	5	5	10
Noun + Preposition	6	4	10
Preposition + Noun	7	3	10
Total	24	16	40

The collocation test consisted of 40 items in 4 sections in a multiple-choice format. Each section was based on one collocation sub-type with 10 questions. The number of Iranian EFL learners who have taken the collocation test was 60. Therefore there are 600 responses in each collocation sub-type. According to the expected proportion in Table 5, the number of possible responses involving positive and negative transfer responses should be as shown in Table 6. Please note that as it is always possible for the participants to make their choices based on other factors than "positive transfer" and "negative transfer", the "other" category may be involved in all 10 responses in 4 collocation sub-types.

Table 6: An overview of proportion of context for positive and negative transfer in collocation test

Collocation types	Positive transfer	Negative transfer	Other
Noun + Noun	360	240	600
Noun + Verb	300	300	600
Noun + Preposition	360	240	600
Preposition + Noun	420	180	600
Total	1440	960	2400

Referring to the results in Table 7 below, 806 out of 1107 correct responses were because of positive transfer. This number shows that L1 transfer has a significant effect in those cases where Iranian EFL learners choose the correct collocations. Furthermore, 340 out of 1293 incorrect answers are because of negative L1 transfer. This reveals EFL learners choose incorrect collocations when they transfer from their mother tongue negatively. However the effect is not significant because 953 out of 1293 incorrect answers are based on reasons other than negative transfer. Table 7 shows the proportion of positive answers which caused the correct collocation to be chosen and the proportion of negative transfer which leads to a choice of as incorrect collocation in all four sub-types of collocations.

Table 7: The proportion of positive and negative transfer in collocation test

Collocation types	Correct		Incorrect		Total
	Positive transfer	Other	Negative transfer	Other	
Noun + Noun	186	106	72	236	600
Noun + Verb	175	68	107	250	600
Noun + Preposition	274	51	72	203	600
Preposition + Noun	171	76	89	264	600
Total	806	301	340	953	2400
Total	1107		1293		2400

4.5. The role of L1 transfer on the production of L2 collocations

The second research question is about the influence of L1 transfer on the production of L2 collocations. Recall from section 2.4 that language transfer is an important cause of collocation errors. This language transfer refers to the influence on the L2 resulting from similarities or differences between the first language and any other learned or acquired language. In fact, transfer refers to the use of the learner's knowledge about their L1 in L2. There are two types of transfer: positive transfer and negative transfer. Positive transfer happens when a structure in the L1 is used in an L2 utterance and the result is target-like in the L2, while negative transfer occurs when a structure from the L1 is applied in an L2 utterance and the result is a non-target utterance (Oldin, 1989).

A multiple-choice test of collocation was administered to measure the students' collocation knowledge of English. The test consisted of 40 items, which were made up of 20 lexical and 20 grammatical collocations. The maximum score for answering 40 questions correctly was 40 points. The students got one point for each time the correct choice was made. Below are some examples of cases where positive and negative transfer are expected in lexical and grammatical collocations.

- Examples of "Noun + Verb" / lexical collocation:

The **anniversary** of the founding of the charity _____ on the 12th of November.

a) falls   b) happens   c) turns up   d) takes place

The correct answer is **falls**. Farsi native speakers are expected to choose **takes place** as the correct answer because of negative transfer from the L1 to the L2.

- Examples of "Noun + Noun" / lexical collocation:

The value of the property almost doubled during the **interim** _____.

a) term   b) space   c) period   d) interval

The correct answer is **period**. Farsi native speakers are expected to choose the correct answer because of positive transfer from the L1 to the L2.

- Examples of "Preposition + Noun" / grammatical collocation:

The prime Minister was ___ **fire**in parliament for his handling of the budget.

a) under   b) in   c) on   d) at

The correct answer is **under**. Farsi native speakers are expected to choose **in** as the correct answer because of negative transfer from the L1 to the L2.

- Examples of "Noun + Preposition" / grammatical collocation:

Nobody refused for **fear** ____losing their job.

a) of   b) from   c) on   d) over

The correct answer is **of**. Farsi native speakers are expected to choose the same answer because of positive transfer from the L1 to the L2.

In order to determine whether the collocation was influenced by positive or negative transfer, first the number of correct and incorrect answers influenced by the L1 was surveyed. Then the number of correct and incorrect answers not influenced by the L1 was investigated. At last the proportion of positive and negative transfer were compared. In section 4.5.1, the influence of the L1 on collocations in correct L2 English collocations will be investigated. Then in section 4.5.2, the influence of the L1 on the L2 in incorrect collocations will presented. In section 4.5.3, correct and incorrect collocations influenced by L1 will be compared, while section 4.5.5 provides the results for correct and incorrect collocations not influenced by the L1. Section 4.6 surveys the proportion of positive versus negative transfer in the different collocation sub-types. Section 4.7 investigates the correlation between language proficiency and negative/positive transfer.

4.5.1. L1 transfer and the production of correct L2 collocation

In Table 7 in section 4.4, we saw that the total number of correct collocation choices was 1107/2400. Of these, 806 were cases in which transfer from Farsi resulted in a correct answer. 301 of the correct responses did not involve L1 transfer. This suggests that "L1 transfer" is an important factor towards using the correct collocations for Iranian EFL learners.

More specifically, taking a look at Table 8 below, the proportion of L1 transfer and no L1 transfer in each collocation sub-type confirms such a result.   The proportion of correct

answers influenced by L1 transfer in Noun + Noun collocations is 64%, while 36 % of the correct responses did not involve L1 transfer. The proportion is 72% for L1 transfer in Noun + Verb but is only 28% when there is no L1 transfer. In Preposition + Noun, the proportion of L1 transfer is 84% and it is 16% when there is no influence of L1 transfer. The proportion of L1 transfer in Noun + Preposition is 69% while it is 31% in no L1 influence.

Table 8: Number and distribution of correct answers involving and not involving L1 transfer
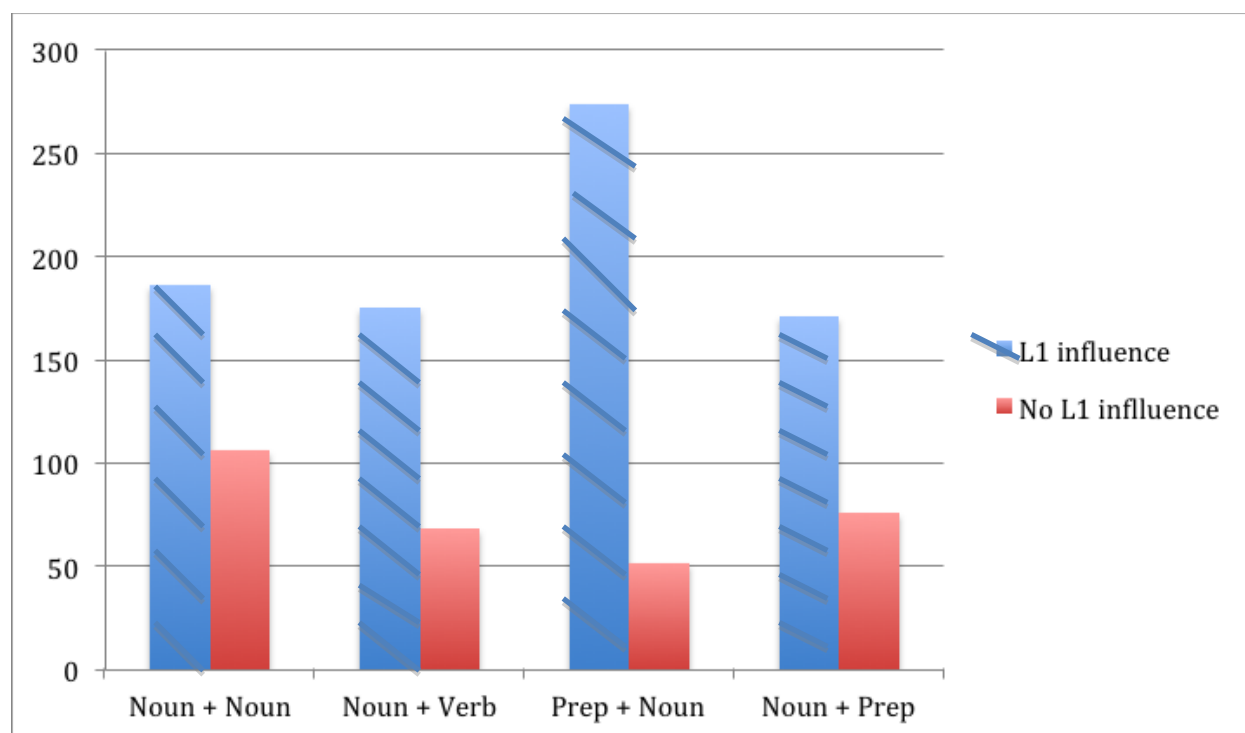
Collocation type	L 1 transfer	No L1 transfer	Total number of correct answers
Noun + Noun	186 (64 %)	106 (36 %)	292
Noun + Verb	175 (72 %)	68 (28 %)	243
Preposition + Noun	274 (84 %)	51(16 %)	325
Noun + Preposition	171 (69 %)	76 (31 %)	247
Total	806 /1107 (73 %)	301/1107 (27 %)	1107

Table 8 shows that generally a high proportion of correct responses are the result of L1 transfer. This table also reveals that this difference is particularly big in Preposition + Noun collocations, where 274 (84 %) involve L1 transfer, while 51 (16 %) do not. Moreover, the result of L1 influence on correct collocations revealed that most of the correct Preposition + Noun collocations were influenced by L1. It means that L1 had a significant impact on producing correct Preposition + Noun collocations.

The smallest differences between correct collocations that are influenced by L1 and those that are not influenced by L1 are found with Noun + Noun collocations. In this type, the number of correct answers is close in both conditions.

The proportion of L1 influence and no L1 influence on different sub-types of collocation answered correctly by Iranian EFL learners are illustrated in Figure 5 below:

Figure 5: L1 influence versus no L1 influence on different sub-types of collocations answered correctly

4.5.2. L1 transfer and the production of incorrect L2 collocation

Now we will consider the impact of L1 transfer in contexts in which this yields an ungrammatical collocation, that is, negative transfer. Interestingly, the situation is the opposite from positive transfer, as the majority of incorrect responses are not the result of (negative) transfer from L1. Table 9 below shows the total number/ proportion of incorrect answers that are and are not the result of L1 transfer in the different collocation types. As we can see, as little as 26% (340/1293) of incorrect responses can be explained as causes of negative transfer.

The number of incorrect Noun + Preposition collocations not influenced by L1 is the highest (264) and the number of incorrect Preposition + Noun collocations is the lowest (203). According to table 9, the total number of incorrect collocations with all four types influenced by L1 (340) is lower than the total number of incorrect collocations with all four types not influenced by L1 (953). It seems that the L1 does not have a leading and decisive role in creating incorrect collocations in all above four types.

The number of incorrect answers influenced by the L1 in Noun + Noun and Preposition + Noun collocations are equal, and thereafter the number of incorrect answers not influenced by the L1 in both types are very close.

Table 9: Number of incorrect answers involving and not involving L1 transfer

Collocation type	L1 transfer	No L1 transfer	Total number of incorrect answers
Noun + Noun	72 (23 %)	236 (77 %)	308
Noun + Verb	107 (30 %)	250 (70 %)	357
Preposition + Noun	72 (26 %)	203 (74 %)	275
Noun + Preposition	89 (25 %)	264 (75 %)	353
Total	340 /1293 (26 %)	953/1293 (74%)	1293

Figure 6 provided a more visual display of the results in Table 9.

Figure 6: L1 influence versus no L1 influence on different sub-types of collocations answered incorrect:
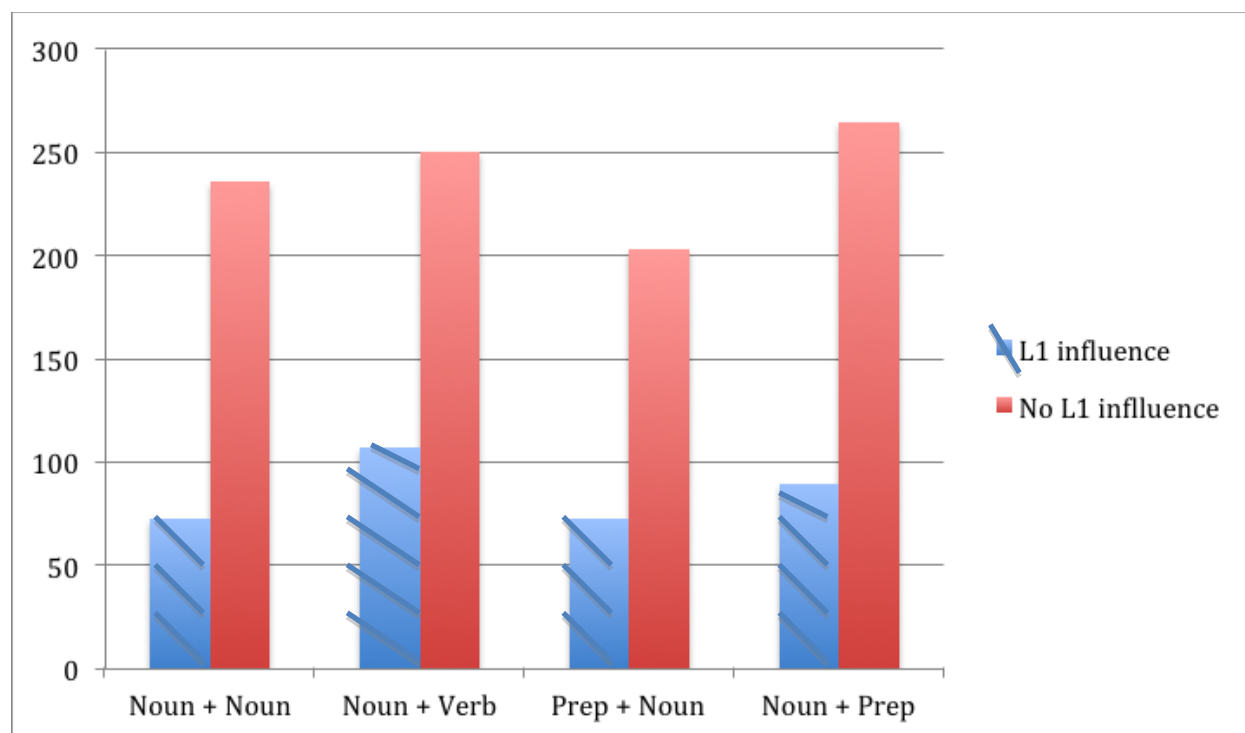
To sum up, if we compare Table 8 and Table 9, a great number of correct Noun + Noun, Noun + Verb, Preposition + Noun, and Noun + Preposition collocations were affected by L1 and transfer has a stronger positive than negative effect. The differences between correct and incorrect collocations influenced by L1 shows that the higher rank belongs to Preposition + Noun collocations and the lower rank to Noun + Verb collocations.

4.5.3. Comparison of correct versus incorrect collocations influenced by L1

   In this sub-section, we will consider the number and percentage of correct and incorrect responses influenced by L1 transfer. Table 10 reveals that the total number of correct answers influenced by L1 is 806 and the number of incorrect answers influenced by L1 is 340. This shows that L1 transfer has a significant positive effect on the use of correct collocations. In other words, L1 had more effect in producing correct collocations than incorrect ones. If we look at the number of correct and incorrect answers in each sub-type of collocation, it can be seen that the percentage of correct answers in the end by the L1 are considerably higher than the percentage of incorrect answers. 72% correct answers versus 28% incorrect answers in Noun + Noun collocations, 62% correct answers versus 38% incorrect answers in Noun + Verb collocations, 79% correct answers versus 21% incorrect answers in Preposition + Noun collocations, and 66% correct answers versus 34% incorrect answers in Noun + Preposition collocations. It can be concluded that L1 influences both correct and incorrect collocations, but played a more leading role in correct collocations than incorrect ones.

Table 10: correct and incorrect answers influenced by L1

Collocation type	Correct answers involving positive transfer	Incorrect answers involving negative transfer	Total number of answers involving L1 transfer
Noun + Noun	186 (72%)	72 (28%)	258/600
Noun + Verb	175 (62%)	107 (38%)	282/600
Preposition + Noun	274 (79%)	72 (21%)	346/600
Noun + Preposition	171 (66%)	89 (34%)	260/600
Total	806/1107 (70%)	340/1293 (30%)	1146/2400

   The greatest difference between correct (274) and incorrect (72) answers influenced by L1 is observed in Preposition + Noun collocations and the smallest difference is found with Noun + Verb collocations, where these represent 175 correct answers and 107 incorrect answers. These results are displayed in Figure 7.

Figure 7: Correct and incorrect collocations influenced by L1
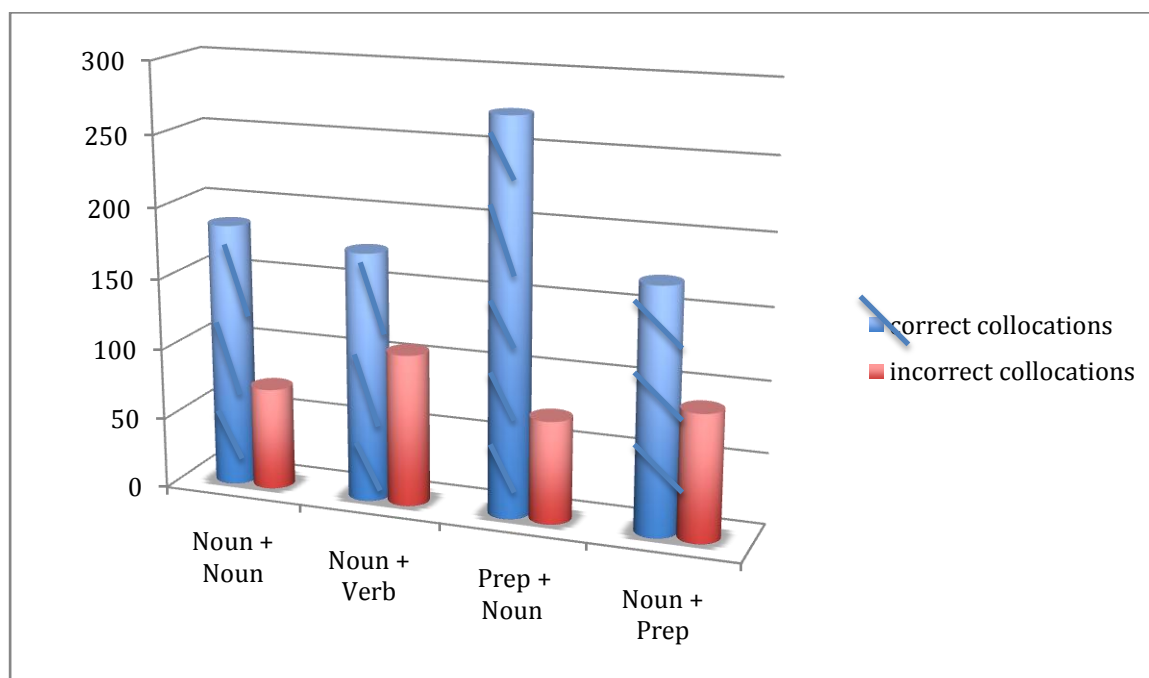
4.5.4. The relationship between the expected and actual proportion of transfer

So far in this chapter, we have considered to what extent the learners use positive and negative transfer in collocations, and we have seen that the participants use more positive than negative transfer. However, it is important to point out that in the collocation task the number of contexts for positive and negative transfer were not the same. The proportion of contexts that involved positive and negative transfer was provided in Table 7 in sub-section 4.4. According to this table, 60% of Noun + Noun and Preposition + Noun collocations included an option that involved positive transfer, while 40% contained an item that represented negative transfer. This means that positive/negative transfer was not expected to occur to the same extent. In Noun + Verb collocations, however, the distribution of contexts for negative and positive transfer was 50/50. In Noun + Preposition collocations the percentage of positive transfer to negative transfer is 70% to 30%. Table 7 (only positive transfer and negative transfer columns) is repeated below as Table 11, but this time with the actual number and proportion of positive/negative transfer.

Table 11: Expected proportion of positive and negative transfer in collocation test

Collocation type	Correct answers involving positive transfer	Incorrect answers involving negative transfer	Total number of answers involving L1 transfer
Noun + Noun	186 (31%)	72 (12%)	600
Noun + Verb	175 (29 %)	107 (18%)	600
Preposition + Noun	274 (46%)	72 (12%)	600
Noun + Preposition	171 (29%)	89 (15%)	600
Total	806 (34%)	340 (14%)	2400

As we can see, neither positive nor negative transfer is used as much as we would expect if the learners always the learners always applied it where possible. However, as we can see from the proportions in Table 11, the learners apply positive transfer more than negative transfer even if we take the expected discrepancy between positive and negative transfer into account. For example, in Noun + Noun and Preposition + Noun collocations, the expected distribution was 60/40, while the real distribution was 31% versus 12% and 46% versus 12% respectively. The differences between positive and negative transfer is larger than expected. This is even more clear with Noun + Verb collocations, where the expected distribution was 50/50, but the actual distribution is 29% versus 18%. The only structure in which the difference is smaller than expected is in Noun + Preposition collocations, where the expected distribution is 70/30 and the real distribution is 29% versus 15%. Furthermore, the total percentage of answers involving positive transfer is 34% while the total percentage of answers involving negative transfer is 14%, compared to the expected 60/40 distribution. Thus, the observed differences between positive and negative transfer can not be accounted for with references to the distribution of contexts in the task. Even if we take into account the fact that there are more contexts for positive than negative transfer, the learners can be seen to use more positive transfer.

4.5.5. Comparison of correct and incorrect collocations not influenced by L1

Let us consider the number and percentage of correct and incorrect answers that are not influenced by L1 transfer. The results show that the number of incorrect Noun + Noun (236), Noun + Verb (250), Preposition + Noun (203), and Noun + Preposition (264) collocations are considerably greater than the number of correct Noun + Noun (106), Noun + Verb (68), Preposition + Noun (51), and Noun + Preposition (76) collocations. In other words, the number of incorrect collocations is higher when EFL learners did not transfer from their

mother tongue. This suggests that L1 transfer is an important factor for EFL learners to use collocations correctly and make fewer errors. These data are summarized in Table 12 below:

Table 12: Correct and incorrect answers not influenced by L1

Collocation type	Correct answers	Incorrect answers	Total number of answers not influenced by L1
Noun + Noun	106 (31%)	236 (69%)	342
Noun + Verb	68 (21%)	250 (79%)	318
Preposition + Noun	51(20%)	203 (80%)	254
Noun + Preposition	76 (22%)	264 (78%)	340
Total	301/1107 (24%)	953/1293 (76%)	1254/2400

Based on the information from Table 12, the biggest differences between correct and incorrect collocations not influenced by the L1 can be seen with Preposition + Noun collocations and the smallest differences are found in Noun + Noun collocations. These results are clearer in Figure 8 below. Interestingly, the same collocation types that exhibited the clearest difference between negative and positive transfer, the Preposition + Noun, also has the lowest proportion of correct responses not influenced by the L1. Recall that 79% of all transfer in this category was positive transfer.

Figure 8: Correct and incorrect collocations not influenced by L1
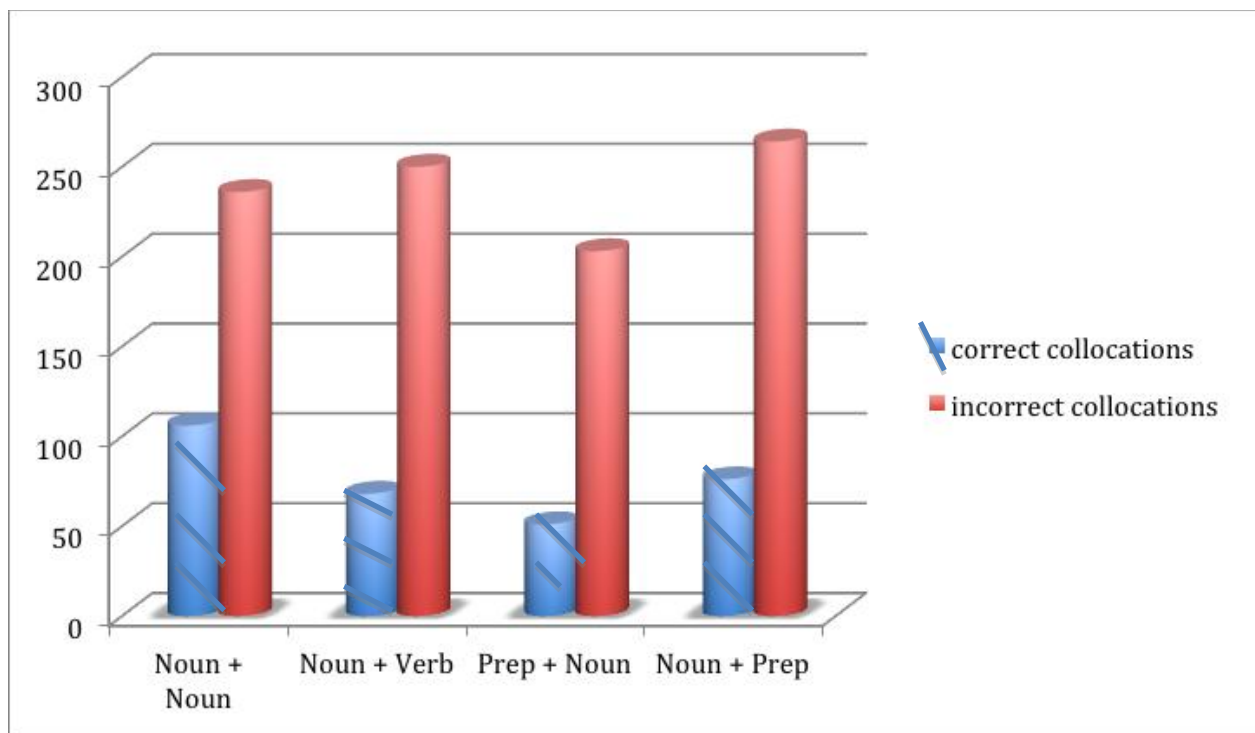
In conclusion, to answer the second research question, which was about the influence of L1 transfer on the production of L2 collocations, the above statistical results show that L1 transfer has a significant influence when EFL learners produce the correct collocations. The difference between producing correct answers compared to incorrect answers is quite big when EFL learners refer to their mother tongue and L1 transfer has a positive effect on collocations in the correct way, even if the imbalance between positive and negative transfer contexts is taken into account.

4.6. The statistical analyses of positive versus negative transfer and collocation sub-types

As was explained in section 2.4, L1 transfer can be positive or negative. In the previous sections in this chapter, the influence of L1 transfer on different collocation sub-types was surveyed. In this section, the statistical analyses in proportion of positive versus negative transfer and collocation sub-types (Noun + Noun, Noun + Verb, Preposition + Noun, Noun + Preposition) will be presented.

Referring to mean scores applied, Table 13 compares positive versus negative transfer in Noun + Noun, Noun + Verb, Preposition + Noun, and Noun + Preposition collocations sub-types. The information in the table reveals that the proportion of positive transfer (0.5041551in Noun + Noun, 0.5833333 in Noun + Verb, 0.6404762 in Preposition + Noun, and 0.4888889 in Noun + Preposition) is higher than negative transfer (0.4602510 in Noun + Noun, 0.2233333 in Noun + Verb, 0.3111111 in Preposition + Noun, and 0.3208333 in Noun + Preposition) in all four types of collocations. This means that in most contexts, when EFL learners transfer from their mother tongue, the results were positive and lead to correct answers.

It is also worth noting that there is no significant difference between positive and negative transfer in Noun + Noun collocations. As can be seen from Table 13 below, the mean scores for positive transfer (0.5041551) and negative transfer (0.4602510) are very close in Noun + Noun collocations. On the other hand, the difference is considerable on Preposition + Noun collocations. The mean score for positive transfer (0.6404762) is more than twice compared with negative transfer (0.3111111).

Table 13: proportions of positive versus negative transfer and collocation sub-types

Collocation types	Positive transfer (mean score)	Negative transfer (mean score)
Noun + Noun	0.5041551	0.4602510
Noun + Verb	0.5833333	0.2233333
Preposition + Noun	0.6404762	0.3111111
Noun + Preposition	0.4888889	0.3208333

Looking at positive transfers in all four types of collocations shows that the proportion of positive transfer is almost at the same level in Noun + Noun (0.5041551), Noun + Verb (0.5833333), and Noun+ Preposition (0.4888889) collocations. The exception is Preposition + Noun, which is a bit higher than the others (0.6404762).

Comparing negative transfer in different types of collocations suggests that the biggest differences are found in Noun + Noun (0.4602510) and Noun + Verb (0.2233333) collocations while Noun + Preposition and Preposition + Noun collocations are almost at the same level (0.3208333 and 0.3111111). These results are illustrated graphically in Figure 9 below:

Figure 9: Positive versus negative transfer and collocation sub-types
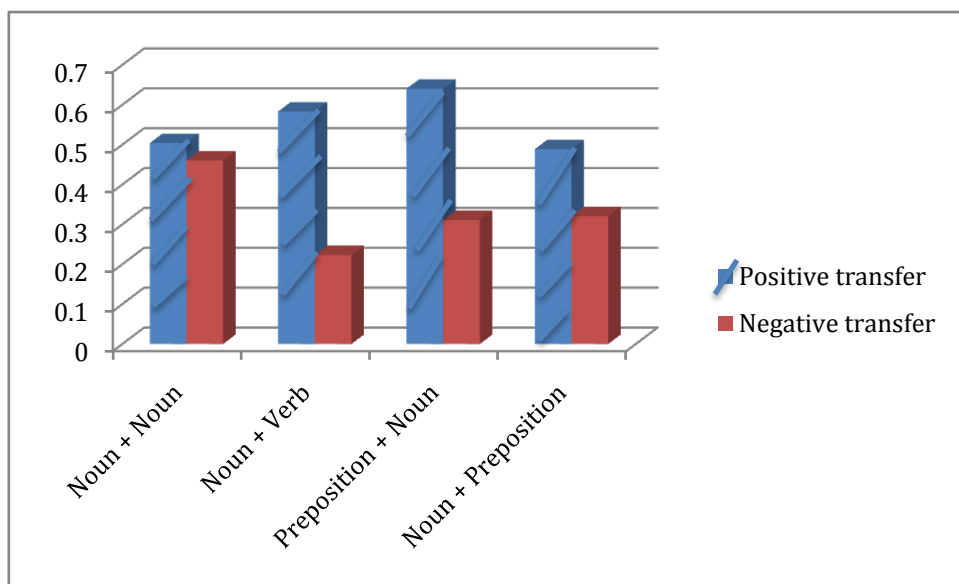
As demonstrated in Figure 9, the proportion of positive transfer in all collocation sub-types is greater than negative transfer. Therefore, the number of correct answers by EFL learners is higher, when positive transfer rates are higher than negative transfer rates. The difference between positive transfer in lexical and grammatical collocations is not significant but it is bigger in grammatical collocation. This is also the case in negative transfer, where the difference between negative transfer in lexical and grammatical collocations is not significant but it is bigger in lexical collocations. The results above can also be shown in a logistic regression as follows:

Fixed effects:

	Estimate Std.	Error z	value P	r(>|z|)
1. Intercept	-0.1740	0.2828	-0.615	0.538361
2. Transfer p	0.1805	0.3506	0.515	0.606647
3. Cond1Noun + Prep	-0.6655	0.3889	-1.711	0.087048
4. Cond1Noun + Verb	-1.2674	0.3769	-3.363	0.000771 ***
5. Cond1Prep + Noun	-0.6931	0.4199	-1.650	0.098843
6. Transfer p:	Cond1Noun+Prep	0.6154	0.4991	1.233 0.217561
7. Transfer p:	Cond1Noun+Verb	1.6538	0.5013	3.299 0.000969 ***
8. Transfer p:	Cond1Prep+Noun	1.3439	0.5183	2.593 0.009521 **

The "intercept" in line one, is the Noun+ Noun condition, in the negative transfer condition. The second line shows that there is no significant difference between positive and negative transfer for the Noun+ Noun condition. Lines three to five compare the different collocation types with the Noun + Noun collocation, and as can be seen from the stars at the far right indicating significance, only the Noun+ Verb collocation is significantly different from Noun+ Noun collocation in the negative transfer condition. Lines six to eight show the interaction between "transfer" and collocation types. According to this model, the difference between the positive and the negative transfer condition is not significant for Noun+ Preposition collocation, but it is for Noun+ Verb and Preposition + Noun collocations.

4.7. Language proficiency and positive/negative transfer

In section 4.2, the correlation between language proficiency and collocations was discussed. I have found that there is a significant relationship between these two variables among Iranian EFL learners. This was illustrated in Table 1 and Figure 1. Then I went through the details and have argued for a correlation between language proficiency and collocation types (lexical and grammatical) separately. From the data set in Tables 2 and 3 and Figures 2 and 3, I have found that there is a significant correlation between proficiency and both lexical and grammatical collocations.

In section 4.5.1 and 4.5.2, I discussed L1 influences on the production of L2 collocations by Iranian EFL learners and showed that there is a strong influence between these two variables. The more L1 transfer EFL learners use, the more correct L2 collocations they produce. Then in section 4.5.3, I made a comparison between correct and incorrect collocations influenced by the L1. The results in Table 10 and Figure 7 showed that there is a significant difference

between these two variables. The number of correct answers is quite a lot higher than incorrect answers when EFL learners transfer from their mother tongue. Next in Section 4.5.5, I compared the proportion of correct and incorrect answers produced by EFL learners when L1 transfer is not involved. The results in Table 12 and Figure 8 show that the number of incorrect answers in all four sub-types of collocations is considerably higher than the number of correct answers. This shows that L1 transfer is very important for the production of the correct collocations by Iranian EFL learners.

In this section, I am going to discuss if there is any correlation between language proficiency and positive/ negative transfer.

First, let us consider positive transfer. Table 14 reveals the total number (35) of correct answers for each EFL learner in the Michigan proficiency test and L1 positive transfer in the collocation test:

Table 14: Language proficiency and positive transfer

Subject number	Total correct answers in proficiency test	Positive transfer	Subject number	Total correct answers in proficiency test	Positive transfer
1	26	17	31	10	5
2	27	24	32	13	10
3	26	20	33	8	11
4	22	17	34	14	10
5	18	19	35	13	17
6	12	13	36	11	13
7	19	19	37	10	7
8	24	16	38	8	9
9	26	21	39	19	18
10	17	15	40	11	13
11	26	16	41	9	7
12	23	17	42	18	11
13	21	17	43	7	7
14	31	23	44	12	12
15	23	13	45	6	7
16	14	14	46	4	8
17	17	14	47	17	14
18	24	16	48	10	9
19	24	15	49	11	11
20	12	11	50	18	13
21	14	16	51	16	10
22	12	10	52	12	9
23	11	14	53	11	11
24	16	21	54	8	14
25	17	12	55	9	12

Subject number	Total correct answers in proficiency test	Positive transfer	Subject number	Total correct answers in proficiency test	Positive transfer
26	5	10	**56**	17	13
27	12	15	**57**	26	19
28	3	9	**58**	13	10
29	13	18	**59**	12	14
30	13	16	**60**	12	4

According to the information taken from the Pearson correlation test, R2=0.5467 and p < 0.0001. This indicates that there is a very strong correlation between L1 positive transfer and proficiency scores. This information can be also seen in the scatter plot in Figure 10 below. The correlation between these two variables is a completely linear one. Both variables are interrelated and the line is positive and upward.

Figure 10: Correlation between language proficiency and L1 positive transfer

On the other hand, interestingly, there is no significant correlation between L1 negative transfer and language proficiency scores. This can easily be seen in table 15, which illustrates the total number of correct answers for each EFL learner in the Michigan proficiency test and the use of negative transfer in the collocation test:
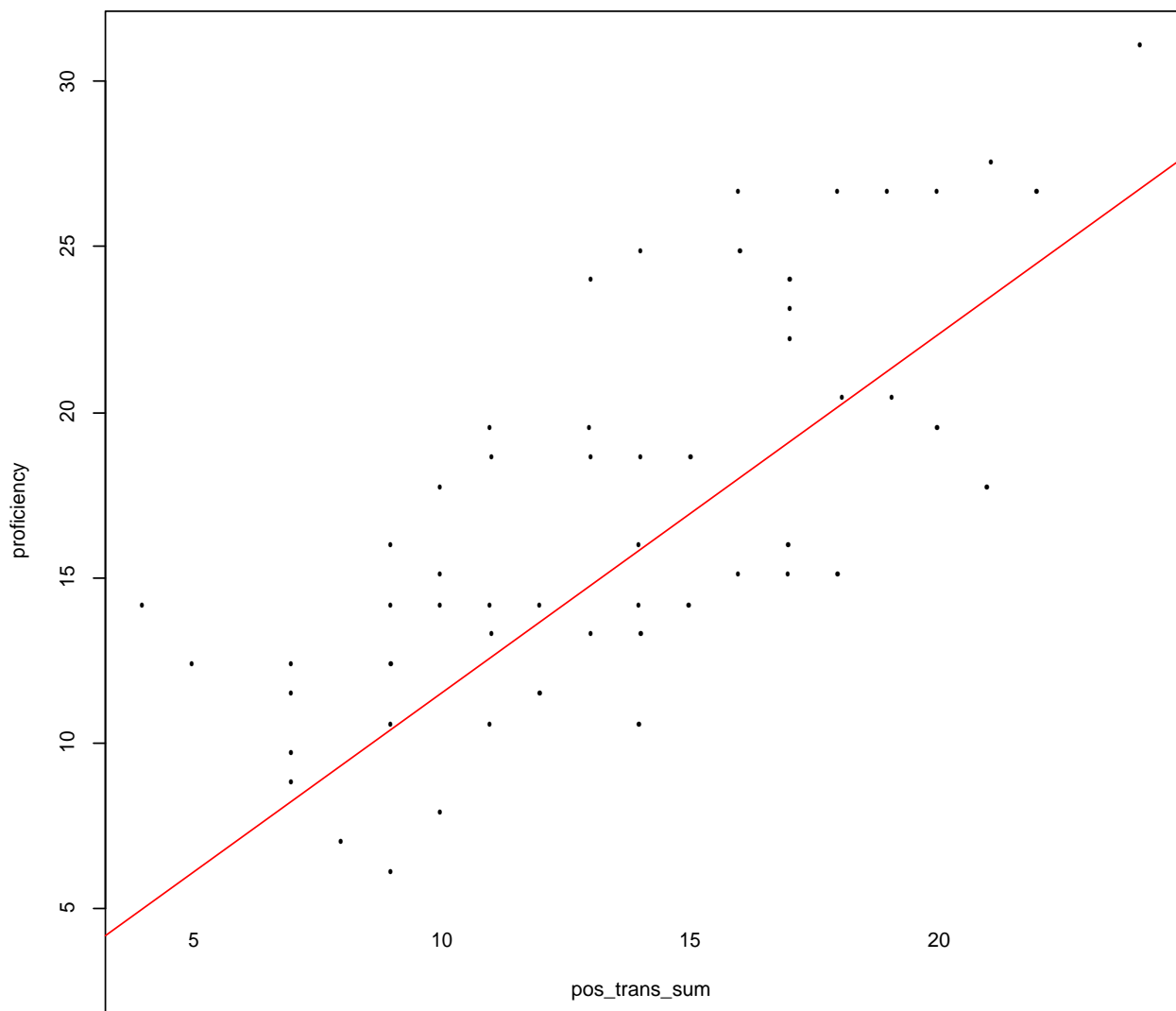
Table 15: Language proficiency and negative transfer

Subject number	Total correct answers in proficiency test	Negative transfer	Subject number	Total correct answers in proficiency test	Negative transfer
1	26	2	31	10	5
2	27	2	32	13	2
3	26	2	33	8	4
4	22	5	34	14	6
5	18	4	35	13	7
6	12	4	36	11	7
7	19	10	37	10	4
8	24	3	38	8	3
9	26	10	39	19	5
10	17	5	40	11	6
11	26	5	41	9	4
12	23	7	42	18	5
13	21	7	43	7	5
14	31	10	44	12	5
15	23	4	45	6	5
16	14	4	46	4	4
17	17	5	47	17	2
18	24	7	48	10	7
19	24	6	49	11	3
20	12	3	50	18	4
21	14	6	51	16	3
22	12	5	52	12	6
23	11	5	53	11	3
24	16	7	54	8	6
25	17	5	55	9	4
26	5	4	56	17	4
27	12	7	57	26	5
28	3	4	58	13	6
29	13	7	59	12	7
30	13	7	60	12	2

After using the Pearson correlation test to analyze the data in Table 15, the statistical data shows the values $R^2 = 0.03065$ and $p > 0.05$. This means that there is no significant relationship between these two variables. Transferring this information to a scattered plot in

Figure 11 below also reveals this general lack of correlation. The dots in plot are spread all around the line and they are not concentrated at all.

Figure 11: Correlation between language proficiency and L1 negative transfer
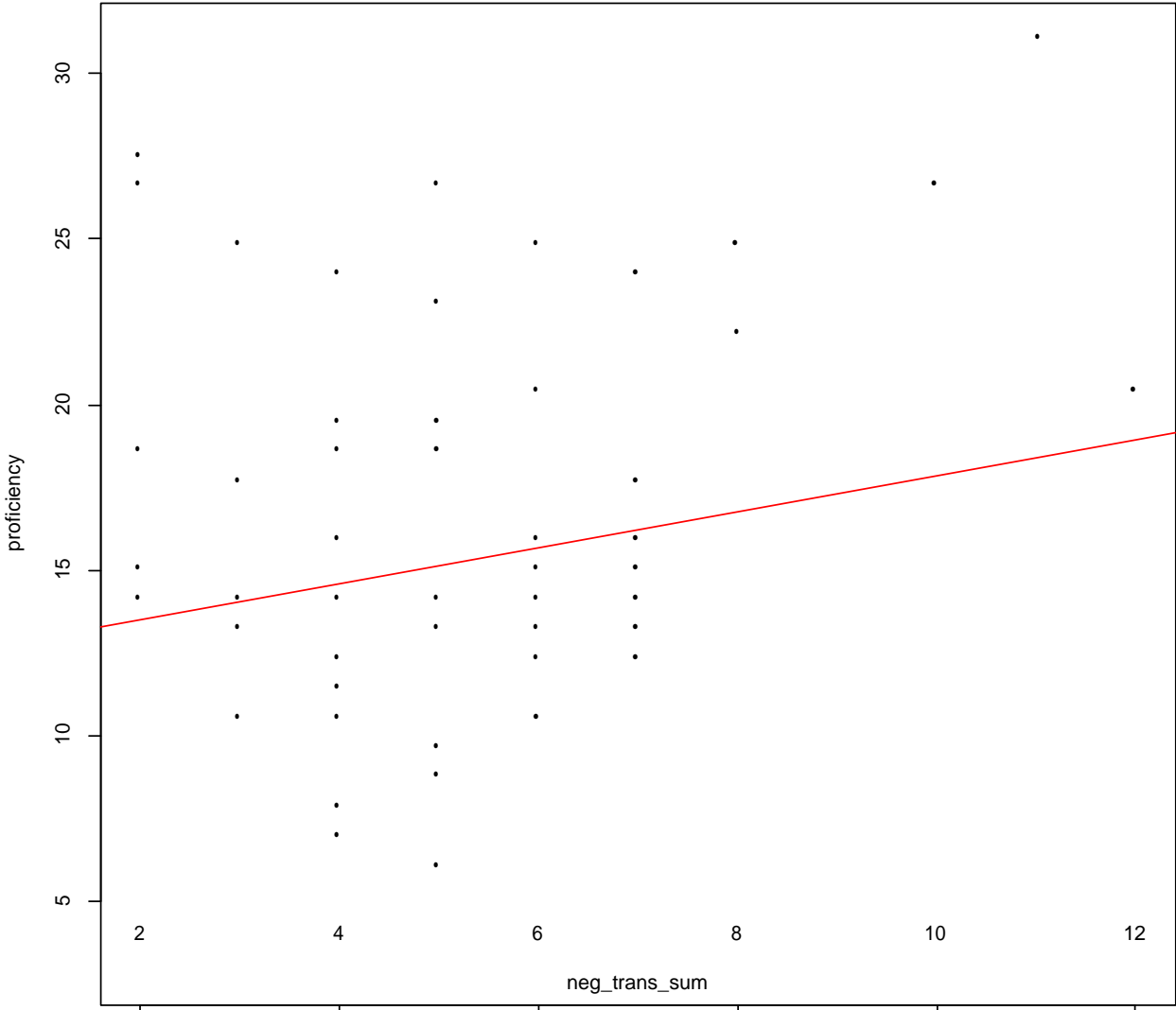
The very strong relationship between L1 positive transfer and language proficiency, and lack of a significant relationship between L1 negative transfer and language proficiency means that the highly proficient language speakers still make as many mistakes as the less highly proficient speakers in L1 with respect to negative transfer. Therefore, whether they are proficient or not, if transfer is negative, most of the questions are expected to be answered incorrectly.

4.8. Conclusion

In this chapter, I have presented the results of the current investigation into a possible correlation between language proficiency and knowledge of collocations as well as the relationship between positive/negative transfers.

The results in section 4.2 show that there is a high correlation between the language proficiency and the collocation knowledge of the Iranian EFL learners.

In section 4.5.1, we saw that the number of correct collocations influenced by L1 transfer is two times bigger than the number of correct collocations not influenced by L1 transfer. This result reveals that when Iranian EFL learners make use of the correct collocations, this is usually due to positive transfer. However, when the learners choose incorrect collocations, this is typically not due to negative transfer.

Based on the information in section 4.5.2, it was revealed that the number of incorrect answers not influenced by L1 transfer is bigger than the number of incorrect answers influenced by L1 transfer.EFL learners choose the wrong answer in most of the occasions when they did not transfer from to their mother tongue. The results were shown in Table 9 and Figure 6.

In section 4.5.3, the number of correct and incorrect answers influenced by L1 transfer was compared. As was clear from the data presented in this section, the number of correct answers influenced by L1 transfer is considerably greater than the number of incorrect answers influenced by L1. This means that L1 transfer is an important factor in producing correct collocations by Iranian EFL learners. The results have been shown in Table 10 and Figure 7.

In section 4.5.6, the number of correct and incorrect answers not influenced by L1 transfer was compared. The results showed that the number of incorrect answers not influenced by L1 transfer is significantly greater than the number of correct answers not influenced by L1 transfer. Therefore, the possibility of producing incorrect collocations is higher when Iranian EFL learners did not transfer from their mother tongue. The results were provided in Table 12 and Figure 8.

Positive versus negative transfer in Noun + Noun, Noun + Verb, Preposition + Noun, and Noun + Preposition collocation sub-types were analyzed in section 4.6. The data set reveals that proportion of positive transfer is higher than the proportion of negative transfer in all four types of collocations. This means that in most questions in the collocation test, when Iranian EFL learners transfer from their mother tongue, the results were positive and leading to correct answers. This information was provided in Table 12 and Figure 9.

The last section (4.7) in this chapter investigates the correlation between language proficiency and positive/negative transfer. The results from the Pearson correlation test revealed that there is a high correlation between language proficiency and L1 positive transfer. The more proficient EFL learners produce more correct collocations by transferring to their mother tongue. The results were shown in Table 14 and Figure 10. However, there is no significant correlation between language proficiency and L1 negative transfer.

Chapter 5
Discussion

5.1. Introduction

According to the findings of this thesis, it is clear that learning individual words and their meaning is not enough to achieve good fluency in a second language. It is also necessary for EFL learners to know how words combine into chunks in their L2. If EFL learners do not learn how words are put together, they will not be able to approach a native-like level of proficiency. The two research questions addressed in this study intended to survey the relation between language proficiency and language transfer in the production of collocations. According to the overall results of the data analysis, a positive relationship was found.

This thesis has discussed certain issues in relation to collocations in English and Farsi. The first issue was the correlation between language proficiency and collocation. The results of the current study indicate that knowledge of collocations can be considered an important factor when the general proficiency of EFL learners is determined. As we saw in section 4.2, there is a significant relationship between Iranian subjects' language proficiency as measured by the Michigan proficiency test and their knowledge of collocations as measured by their performance on the collocation test. The results of previous studies reveal thatthe correlation between language proficiency and knowledge of collocation are inconsistent. Some researchers such as Faghih & Sharifi (2006), Keshavarz & Salimi (2007) and Sadeghi (2009) found that EFL learners' collocation proficiency increases as their language proficiency improves. But other studies like Morshali (1995), Shokouhi& Mirsalari (2010) show that there is no significant relationship between language proficiency and collocation proficiency. My findings are consistent with the findings of the first group and confirm that there is a significant correlation between language proficiency and collocation knowledge. The more proficient EFL learners are, the more they choose the correct collocations in English. However, the correlation between language proficiency and knowledge of collocation is not a cause + effect correlation. But this positive correlation let more proficient EFL learners use collocations that are much closer to those of native speakers.

The second research question addressed in the current study relates to the relationship between collocations and transfer. The results obtained for this research question showsthat Iranian EFL learners are more likely to use the correct collocation in cases where L1 transfer

yields the correct combination in the L2 than when this is not the case. Thisconfirms that positive transfer plays a major role when it comes to EFL learners' ability to choose the correctcollocations in their L2. This outcome is in line with Ellis's (1985) view that there should be a reappraisal of the role of the L1 into the L2 setting. In addition, I found that negative transfer can only explain a limited proportion of non-target collocations, in the sense that the learners produced fewer collocation errors in contexts where transfer would yield a non-target utterance than they did in other contexts. This finding is in line with Biskup's (1992) claim that interference is not the major cause of L2 learners' errors. In contrast, Bahn (1993) argued that EFL learners sometimes transfer collocations in their first language inappropriately to the second language.

As we can see, various linguists have had different results when they have studies collocations. This inconsistency may have different causes. The first is that different studies looked at different types of collocations. As we saw in section 2.3, Benson et al. (1986a) divides collocation in two major groups, grammatical collocations and lexical collocations (There are eight major kinds of grammatical collocations and seven kinds of lexical collocations). For instance, Keshavarz & Salimi (2007) have worked on both lexical collocations and grammatical collocations and found a correlation between language proficiency and collocation knowledge, while Shoukouhi & Mirsalari (2010) only focused on lexical collocations and found the same result. A second possible explanation for these inconsistencies is the different ways that different researchers test the EFL learners. For example, Faghih & Sharafi (2006) used a vocabulary test to work on the error pattern in the vocabulary of the Iranian EFL learners, while Sadeghi (2009) used a multiple choice collocation test to measure collocation competence and language proficiency of the Iranian students.

In this chapter, I first discuss learners' problems with collocation in general. Then, I will compare and contrast my findings of lexical and grammatical collocations in chapter 4. Next, there will be a comparison between the EFL's group and individual function in Language proficiency test and collocation test. Finally, some teaching implications will be presented.

5.2. A general review of EFL learners' difficulties with collocations

Wray (2002, p.183) hypothesizes that the way in which native and non-native speakers approach language is different. Language processing for native speakers begins with large and complex strings; they do not break them down more than necessary. Their treatment of collocations can be seen as formulaic pairings that have become loosened-strings of words

that can be separated under special circumstances. However according to Wray (2002), this process for post-child-hood EFL language learners start with small units and then make large strings from these small units. They learn collocations as separate words rather than in a collocation context. It is generally agreed that advanced English learners need to apply a wide range of complex lexical and grammatical units, which for a native speaker are processed as prefabricated chunks, fixed or semi-fixed expressions.

The fact that EFL learners acquire L2 words individually, without paying enough attention to the way they combine with one another, is another reason for their problems with collocations. For example, they might know the meaning of "generation"," gap" and "distance" in isolation, but they produced strings like "generation distance" instead of "generation gap". Furthermore, EFL learners do not know the differences between the L1 and the L2 they are learning. Many of them produce collocations like "study knowledge". One reason is that EFL learners do not know that "study" can not collocate with "knowledge" in English. Therefore, teachers need to increase EFL learner's awareness about the difference between their L1 and the L2 they are learning.Somehow, EFL learners may know the difference between the L1 and the L2 they are learning, but they have to borrow expressions from their mother tongue if collocation production goes beyond their capacity. This makes communication easier for them.

In section 4.3.1, I have found that the proportion of correct collocations influenced by L1 transfer (73%) is considerably largerthan correct collocations not influenced by L1 transfer (27%). This means that L1 transfer played a positive and important role in producing correct collocations by the EFL learners studied here. This positive language transfer happens when the pattern of the L1 and the L2 are the same. Referring to the collocation test in this thesis, it was clear that in responding to some test items, Iranian EFL learners were helped by positive transfer from Farsi. This means that certain collocations had equivalents in Farsi which made it easier for EFL learners to respond to. The below list shows the positively transferred items in the collocation test, that I have used in this study.

a) His latest **albumcomes out** in the spring. (1)
b) The local authority runs an **advice center** in the town. (3)
c) He studied his books **on** his father's **advice**. (5)
d) Education has become an important **campaign issue.** (8)
e) The **headofgovernment** is usually the effective ruler of the country. (11)
f) The stereo phonic earphones can be used in **connectionwith**the new sound system.
(12)

g) It's cheaper if you book the ticket **inadvance**. (13)

h) The value of property almost doubled during the **interim period.** (14)

i) He has survived several **assassination attempts.** (15)

j) She was chosen in **preferenceto** her sister. (16)

k) He fell down the steps like a **ball rolling** on the ground. (18)

l) There is no need to do anything **for a while**. (19)

m) A visit to the flood-stricken area seemed **in order**. (22)

n) After the bomb, an uneasy **calm settled** on the city. (24)

o) The **clock** on the mantelpiece **said** twelve o'clock. (26)

p) I had great **admirationfor** her as a writer. (28)

q) There was enough evidence that he broke the cup **onpurpose**. (29)

r) **Convention dictates** that dangerous physical action is the part of heroes, not Heroines. (30)

s) The date of her birth is **onrecord** in Leon Country, Florida. (33)

t) Many scientists believe that there is a need for greater **concentration on** environmental issues. (34)

u) She now has **authority over** the people who used to be her boss. (35)

v) Nobody refused for **fearof** losing their job. (36)

w) Three building were bombed last night in an **airstrike** on the city. (37)

x) If a liquid or a gas is kept **underpressure**, it is forced into a container so that when the container is opened, the liquid or gas escape quickly. (39)

The above list of collocationspredictably can be categorized as high frequency collocations that were answered correctly by most of the Iranian EFL learners.

Positive L1 transfer in the acquisition of English has been examined by different SLA researchers. Biskup (1992) and Gitsaki (1999) found that, in learning English as a second language, collocations that had equivalents in EFL learners' L1 were easier and more likely to be elicited than the ones having no equivalents in EFL learners' mother tongue. For this reason, Biskup (1992) suggested that the teaching of collocations should be limited to those that have no equivalent in students' L1 and cause negative transfer, since the number of collocations is too large to cover.

As a Farsi native speaker, I have arrived at the same conclusions. In section 4.3.2, I found that the number of incorrect collocations not influenced by L1 transfer (74%) is bigger than incorrect collocations influenced by L1 transfer (26%). This also supports the view that

positive transfer helps EFL learners to produce more correct collocations. This result was true for both of lexical and grammatical collocations.

Martin (1984), on the other hand, argues in a different way. He claims that L1 influence is not very important in the area of lexical collocations. Biskup (1992) also considered the role of L1 transfer in a translation test on collocations. She found 21% L1 influence on inappropriate collocations with German learners and 48% with Polish learners.

But language transfer is not necessarily a positive thing. It can also be negative. Thedifferent patterns of the L1 and the L2 might be problematic for EFL learners. The data in chapter 4 showed when Iranian EFL learners did not know a certain word combination, they resorted to their mother tongue and used incorrectcollocations from their L1. The items below are examples where transfer was problematic in the collocation test because there were no alternative for them in the Farsi Language.

a) The **anniversary** of the founding of the charity **falls** on the 12th of November. (2)
b) The prime Minister was **underfire** in parliament for his handling of the budget. (4)
c) I've always had a certain **fondness for** her. (6)
d) Obviously there wasn't any **pointin** waiting longer. (7)
e) **Communication** between the two sides has **broken down**. (9)
f) **Business** is **booming** for estate agents in the south as the property market hots up. (10)
g) He managed to find a job **through** an **agency**. (17)
h) The **blame falls** on the police, who failed to act quickly enough. (20)
i) Frenetic diplomatic activity is now **underway** in at least half a dozen capitals. (21)
j) I was aware of a real **generation gap** between us. (23)
k) He suffered from severe **language impairment.** (25)
l) The high walls give the garden **protection from** the wind. (27)
m) This **color runs** so wash the shirt separately. (31)
n) What is the **level** of **inflation** in your country? (32)
o) The extension will provide 600 square meters of new **gallery space.** (38)
p) She had little **success in** getting new customers. (40)

For example, "Under fire" is an example that causes the EFL learners to choose the wrong option. In Farsi, "fire" collocates with preposition "in" but it does not collocate with "under".

My findings are in line with Sadeghi (2009) who investigated the collocation differences between L1 and L2 by comparing collocations between Farsi and English. He concluded that transfer of collocations that do not have alternative in the mother tongue is an important factor of incorrect use of them by EFL learners. Zinkgraf (2008) also has a similar opinion and surveyed the collocation errors which were caused by incorrect L1 transfer.

5.3. Lexical vs. Grammatical collocations

In section 2.3, I referred to Benson et al. (1986a), who sorted collocations into two main groups: grammatical collocations and lexical collocations. The first group is a phrase that is made by combination of a dominant open class word such as a noun, a verb or an adjective, plus a grammatical word like a preposition or grammatical structural pattern like a clause or an infinitive. The second group, on the other hand, only has different combinations of nouns, adjectives, adverbs and verbs. It excludes clauses, infinitives or prepositions. The types of grammatical collocations used in this paper were "noun + preposition" and "preposition + noun". The types of lexical collocations were "noun + verb" and "noun + noun".

According to the results discussed in section 4.2, lexical collocations seem to be more difficult than grammatical collocations for EFL students, although this difference is not significant. The proportion of correct answers in lexical collocations is 48.32% while it is 51.68% in grammatical collocations.

This is not in line with the findings in Cobbs' (2000). He argues that grammatical collocations are more difficult to learn because of the more arbitrary nature of this type in comparison with lexical collocation. Cobb (2000, p.94) further claims that all collocations are of an arbitrary nature, but grammatical ones are more unpredictable and there is no logic underlying them. He suggests that this arbitrariness creates certain problems for non-native English speakers. Lewis (2000) shares his view and claims that the unacceptability of some word combinations in English, like grammatical collocations, is not based on compatibility in the meanings of the individual items, but rather on grammatical convention. EFL learners who are not aware of these grammatical conventions may produce unacceptable combinations.The results discussed in section 4.2 revealed that the continuum from the easiest to the most difficult collocations is:

Preposition + Noun > Noun + Noun >Noun + Preposition >Noun + Verb

The proportion of correct answers for Preposition + Noun is 29.35%, whereas the proportion of correct answers for Noun + Noun is 26.37%, the proportion of correct answers

for Noun + Preposition is 22.33% and the proportion of correct answers for Noun + Verb is 21.95%.

Shokouhi & Mirsalari (2010) tried to determine which type of collocation is more difficult for EFL learners. The types of lexical collocations used in his study were Noun + Noun, Verb + Noun, Noun + Verb and Adjective + Noun, while grammatical collocations were Noun + Preposition and Preposition + Noun combination. He used a multiple choice test of collocation. His results were the opposite of what I have found in this study. He showed that grammatical collocations were more difficult than the lexical collocations for Iranian EFL learners. Among collocation sub-groups, Noun + Preposition was the most difficult and Noun + Verb was the easiest one. The EFL learners performed differently with the same sub-group of collocations in my study. The Noun + Verb sub-group was among the most difficult while it was the easiest in Shokouhi& Mirsalari's (2010) study.

Namvar et al (2012) also tried to specify the collocation errors that Iranian EFL learners make by focusing on Noun + Preposition in grammatical collocations and Noun + Verb and Verb + Noun in lexical collocations. His finding is in line with my results in regards to the most difficult collocation category for EFL learners. Namvar et al (2012) found that Noun + Verb collocations were the most difficult ones for EFL students while Verb + Noun collocations were the easiest group. He believes that when English collocations had an equivalent in Farsi, the students provide the correct collocations. On the other hand, when there was a difference between the collocations in L1 and L2, EFL learners faced problems with the items.

5.4. Comparing results in proficiency test and collocation test

By taking a brief look at table 4 in section 4.2, we can see that EFL learners with a high proficiencyhad more correct answers in the collocation test most of the time. For example subject 1 had 26/35 correct answer in the proficiency test and 21/40 in the collocation test. Subject 2, 8, 14, 57 in order had 27/35, 19/35, 31/35, 26/35 correct answers in the proficiency test and 23/40, 24/40, 29/40 and 24/40 correct answers in the collocation test. Based on these results, the more proficient EFL learners are, the better they apply collocations. In most of the cases, they transferred positively when there was a similar pattern in the L1 and the L2. Therefore, there is a high correlation between language proficiency and positive transfer. This can also be seen in Figure 10 in section 4.5, which shows a complete linear correlation between these two variables.

The same correlation was found onopposite end of the scale as well. EFL learners with a low proficiency answered few collocation items correctly. For instance, subject 6 had 12/35 correct answers in the proficiency test and 14/40 correct answers in collocation test. Subject 26 had 5/35 correct answers in the proficiency test and 14/40 correct answers in the collocation test. Subject 38 and subject 45 had 8/35 and 6/35 correct answers in the proficiency test and 13/40 and 12/40 correct answers in the collocation test. Accordingly, less proficient EFL learners have not internalized collocations very well.We might have expected this to be based on negative transferwhen the patterns in the L1 and the L2 were different. But taking a look at Figure 11 and Table 14 in section 4.5 tells us that there is no significant correlation between language proficiency and negative transfer. As seen in table 14, subject 11 had 26/35 correct answers in the proficiency test but only used negative transfers 5 times. Subject 14, 39 and 57 answered 31/35, 19/35 and 26/35 items correctly in the proficiency test, but they only had 10, 5 and 5 cases of negative transfer. The situation is similar for most of the individuals. Therefore both high proficiency and low proficiency EFL learners might transfer negatively to their mother tongue when there is no similar pattern in the L1 and the L2. Language proficiency does not play an important role in this area. If we again look at table 4 in section 4.2, this result isconfirmed. There, some subjectsbehaved differently from the others. Subject 11, 12 and 23 had high levels of general proficiency in English, but their results were disappointing when it came to applying collocations. Subject 11 answered 26/35 items of the proficiency test correctly while only 9/40 items were correct in the collocation test. This result was similar for subject 12 which had 23/35 correct answers in the proficiency test but only 12/40 correct answers in the collocation test. Subject 15 also answered 23/35 items correctly in the proficiency test and 14/40 items correctly in the collocation test. There were also some individuals with low proficiency who were quite good in applying collocations. Subject 31 had only 10/35 correct answers in proficiency test while 24/40 correct answers in collocation test. Subject 35, 54 and 59 in order had 13, 8 and 12 correct answers respectively in the proficiency test but 25, 21 and 23 correct answers in the collocation test.

To conclude, we know that the results are limited in terms of respondents, stage of learning and time. Therefore, if we study and test other individuals, we might get somewhat different results. If we examine the same EFL learners after a year or so, the results might be different. However, this should not reduce the importance of the results, as they are not that different from other results in similar studies. So, studies on special groups of EFL learners at different

levels of their schooling and levels of the knowledge of collocation should be continued as there are more discoveries to be made.

5.5. Implications for teaching

The findings of this study have some implications for language teaching. My personal experiences at high school and the university show that most EFL courses in Iran focus on grammar more than vocabulary. This prevents EFL learners and even the teachers themselves from learning and using word combinations. This inefficiency is mostly due to a lack of knowledge of word combinations among Iranian EFL students, the type of instruction they receive and the insufficient emphasis given to the teaching of collocation patterns in their textbooks.But a brief look through EFL coursebooks such as Flower and Berman (1989), McCarthy and O'Dell (1994), Redman and Ellis (1991) indicates that text book authors and teachers are paying more attention to the necessity of learners to acquire collocation knowledge. As stated in this paper, collocation deserves a place in L2 learning and teaching. Teaching materials should include collocations that are highly frequent and acceptable in a neutral register. With the existence of vast corpora, it is easy to organize the collocations used by native speakers based on their frequency.The more frequently a collocation is used, the earlier it should be involved in L2 learning and teaching. Teachers can alsocarry out experimental research to find which collocations are mostly used incorrectly by EFL learners. This way, they will know which collocation types and sub-types deserve more attention when they teach. To compensate for the lack of collocation knowledge both in receptive and productive use, teachers should include collocation patterns into EFL vocabulary teaching to help language learners develop their vocabulary knowledge (Fox, 1998).

Teachers can put emphasis on the inclusion of selected grammatical and lexical collocations in reading comprehension passages. It will let them provide the EFL learners with a contextual opportunity for exploring collocations. They can also ask the students to apply some of these collocations while working on written texts topically selected to elicit some of the chosen collocations. However teaching and learning English collocations should not be limited to course books. A course book can play a guiding role. Teachers should try to activate EFL learners' creativity by using aids to collocation learning like lexical matching and networks. This type of tests should not be presented as immutable, but rather as tentative tools that EFL learners can test against further data (Meara, 1997). Therefore it is possible that the associations caused by and across items in these types of exercises could aid retention of items by EFL learners.

Taiwo (2001, p.323) claims that the likelihood of combining words in a correct way is very low if EFL learners have not read them before. Therefore, teachers should persuade EFL learners to read a lot of literature written in English. This provides them with exposure to a huge amount of vocabulary and new collocations. They should also encourage EFL learners to use English dictionaries effectively. A dictionary is a trusted source of the facts of a language. Some of them like Collins Cobuild English Dictionary and Oxford Advanced Learners Dictionary, which are based on naturally occurring data, are especially good for acquiring English collocation.

In most of these suggestions, the teacher should try to raise the consciousness of collocations in EFL learners.In fact teachers should know that the procedure of learning a foreign language is not the acquisition of new knowledge but it is additional use of what EFL learners already know.

Chapter 6
Conclusion

The present study has investigated the L2 acquisition of collocations in English by Iranian EFL learners. It has investigated the correlation between the knowledge of collocation among Iranian EFL learners and their language proficiency in English. Additionally,the study has surveyed if there is any L1 influence on the production of the L2 collocation of second language learners, specifically through negative or positive transfer. To classify collocations, this paper considered Noun + Noun and Noun + Verb in lexical collocations, and Preposition + Noun and Noun + Preposition among grammatical collocations based on Benson et al. (1986a). A proficiency test and a collocation test were selected to measure the knowledge of 60 Iranian EFL learners. Thisstudyaimed to answer the following research questions:

- Is there any correlation between language proficiency and the knowledge of collocation of second language learners?
- Research question 2: Is there any L1 influence on the production of L2 collocation in second language acquisition?

To answer the first research question, a Pearson correlation test was used. It showed that there is a significant correlation between the results in the language proficiency test and the collocation test. It also demonstrated that grammatical collocations are easier to acquire than lexical collocations for the Iranian subjects of this study. There is a statistical difference between the performances of the EFL learners on different collocation sub-groups. Among those that I have studied, Noun + Verb collocations were the most difficult ones for Iranian EFL learners. On the other hand, Preposition + Noun collocations were the easiest group for them. In most of the items, EFL learners tended to produce a correct collocation when there were equivalents between the Farsi collocations and English collocations. But they faced difficulties when there was no similarity in the two languages. Therefore, while collocation knowledge of Iranian EFL learners expands alongside their general language proficiency, they still benefit from a curriculum that includes different types of collocations, especially collocations that are linguistically different from those in Farsi.

To answer the second research question, the results of the collocation test were investigated. They indicated that the number of correct answers influenced by L1 transfer is considerably greater than the number of incorrect answers influenced by L1. This means that L1 transfer is

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an important factor in producing correct collocations by Iranian EFL learners. Including collocations in curriculum and encouraging EFL learners to use them appropriately and effectively, will cause an efficient communication. This is more useful with adult EFL learners that are not comfortable with their limited structural and lexical knowledge.

This paper examined just 4 types of grammatical and lexical collocations. Although the selected sub-groups are among the most common collocations, as mentioned by Benson et al (1986a), they may not necessarily shows EFL learners' overall collocation knowledge.

A significant implication of the findings of the study is that they increase our understanding of collocations used by Iranian EFL learners. This may help Iranian non-native English speakers communicate better and select word combinations which are closer to those that native speakers use. This is important since the ability to use collocations properly is as important as any other aspect of linguistic knowledge in a foreign language and failure to use them correctly is likely to hinder effective communication with interlocutors with various linguistic and cultural backgrounds.

In teaching English as a second language, students must first and foremost be made conscious of word combinations. Today's EFL learners may be tomorrow's teachers; they might persistently run the risk of presenting wrong connotations in the foreign language texts they produce. Therefore, it is always important to be aware of collocations while learning a new language. Hoey (2005) believes that one thing which distinguishes advanced EFL learners from native speakers is that they mostly manifest "grammatical correctness but collocation inappropriateness" in their language performance. In other words, it is difficult for advanced EFL learners to apply and use the appropriate rules of collocation limitations that are related to the context of language use. Teachers should know about the importance of collocations in their teaching. Changing learner's attitude to the use of collocations, especially in more problematic parts, may improve EFL learners' skills. Based on this research, Noun + Verb collocations were the most difficult type for Iranian EFL learners. Teachers can focus on this area and consider various exercise and classroom activities to promote the use of this sub-group of collocations. In addition, material developers and syllabus designers can also benefit from this study. Collocation is one of the most problematic parts of learning a new language for EFL learners, not because they are incapable of learning them but most likely they have never been exposed in a formal and clear way to the lexical and grammatical collocations of target language. Furthermore, the English books used in Iranian high schools have a list of single new words at the end of each unit. These single words can be replaced by word

combinations or their Farsi equivalents at the end of each course book. Translators can also pay attention to collocations in both L1 and L2 to raise the quality of their translations.

References

- Alanen, R. (1995). Input enhancement and rule presentation in second language acquisition. In R. Schmidt (ed.), Attention and awareness in foreign language learning and teaching. Honolulu: University of Hawai'i Press, 259-302.

- Bahns, J. (1993). Lexical collocations: a contrastive view. ELT Journal, 47 (1), 56-63.

- Bahns, J. &Eldaw, M. (1993). Should we teach EFL students collocations? System, 21 (1), 104-114.

-Bahns, J. &Eldaw, M. (1993). Lexical collocations: a contrastive view. ELT Journal 47, 56-63.

- Benson, M., Benson, E., &Ilson, R. (1985). The structure of the collocational dictionary. International Journal of Lexicography, 2, 1-14.

- Benson, M., Benson, E., &Ilson, R. (1986a). The BBI combinatory dictionary of English: A guide to word combinations. (pp.i-v). Amsterdam: John Benjamins.

- Benson, M., Benson, E., &Ilson, R. (1986b). Lexicographic description of English, 24. Amsterdam/Philadelphia: Benjamins.

- Benson, M. (1989). The structure of the collocation dictionary. International Journal of Lexicography, 2, 1-14.

- Biskup, D. (1992). L1 influence on learners' renderings of English collocations: a Polish/German empirical study in PJL Arnaud and H. BeAjoint (eds.): Vocabulary and Applied Linguistics. Vocabulary and Applied Linguistics, 85 - 93.

- Bolinger, D., & Sears, D. A. (1981). Aspects of language, 87-88. New York: Harcourt Brace Jovanovich, Inc.

- Bonk, W. (2000). Testing ESL learners" knowledge of collocations. (ERIC Document Reproduction Service No. ED 442309)

- Briggs, S., Dobson, B., Rohlick, Th., Spaan, M.,& Strom, E. (1997). Examination for the Certificate of Proficiency in English, 4-7.

- Brown, D. (1980) Principles of Language Learning and Teaching. Englewood Cliffs: Prentice-Hall Regents.

- Brown, D. (2001). Teaching by proinciples: 2nd ed. An interactive approach to language pedagogy. New Jersy: Longman.

- Carter, R. (1998). Vocabulary. Applied Linguistics perspectives (second edition). London: Longman.

- Carter, R., & McCarthy, M. (1988). Vocabulary and language teaching, 68-75. New York: Longman.

- Channel, J. (1981). Applying semantic theory to vocabulary teaching. ELT Journal**35**(2), 115-122.

- Choueka, Y. (1988). Looking for needles in a haystack. Proceedings of RIAO '88, 609–623.

- Cobb, E. (2000). Testing EFL vocabulary. Oxford, UK: Pergamon Press.

- Cowie, A. (1981). The treatment of collocations and idioms in learners' dictionaries. Applied Linguistics **2**(3), 223-235.

- Cowie, A. (Ed.) (1998a). Phraseology, Theory, Analysis, and Applications. Oxford: Clarendon.

- Cruse, D. A. (1986). Lexical semantics. Cambridge: Cambridge University Press.

- Davis, P., &Kryszewska, H. (2012). The company words keep: Lexical chunks in language teaching. Peaslake: Delta Publishing.

- Dechert, R. & Lennon, S. (1989). Collocational blends of advanced second language learners. In S. Weigle (Ed.), Learning Vocabulary for Different Purposes, 98-116. Oxford, UK:Pergamon Press.

- Doughty, C. (1991) Second language instruction does make a difference, Evidence from an empirical study of ESL relativization. Studies in second Language Acquisition, 13, 431-69.

- Ellis, N.C. (2001). Memory for language. In P. Robinson (Ed.), Cognition and second language instruction, 33-68. Cambridge: Cambridge University Press.

- Ellis, N. C., Simpson-Vlach, R., & Maynard, C. (2008). Formulaic language in native and second-language speakers: Psycholinguistics, corpus linguistics, and TESOL. TESOL Quarterly, 41(3), 375-396.

- Ellis, R. (1985). Understanding second language acquisition, 47. Oxford: Oxford University Press.

- Eyckmans, J., Boers, F., &Demecheleer, M. (2004). The Deleted-Essentials Test: An effective and affective compromise. Humanising Language Teaching 6. Retrieved from www.hltmag.co.uk/nov04/mart04.htm

- Faghih, E. & Sharafi, M. (2006). The impact of collocation on Iranian EFL learners Inter-language. Science and Research Quartely, 16, 58.

- Farghal, M. &Obeidat, H. (1995). Collocations: A neglected variable in EFL. IRAL, 33 (4), 315-331.

- Farrokh, P. (2012). Raising Awareness of collocation in ESL/EFL classrooms. Journal of studies in Education, 2, No.3.

- Firth, J. R. (1957). Papers in linguistics, 1934-1951.London, Oxford University Press.

- Flower, J.& Berman, M. (1989). Build Your Vocabulary Hove Language Teaching Publications

- Fox, M. (1998). Teaching collocations: Further developments in the lexical approach. Hove: Language Teaching Publications.

- Gharaee, M. R. (2002). The effect of input enhancement on structure rule acquisition by Iranian EFL learners.Unpublished MA Thesis, English Language Department, Isfahan University: Iran

- Gitsaki, C. (1999). Second language lexical acquisition: a study of the development of collocation knowledge. San Francisco: International Scholars Publications.

- Granger, S. (1998): prefabricated patterns in Advanced EFL Writing: collocations and Formulae [w:] A.P. Cowie red. Phraseology: Theory, Analysis, and Applicatons, Oxford, s, 145-160.

-Gyllstad, H. (2007). Testing English collocations: Developing tests for use with advanced Swedish learners. PhD thesis. Lund University.

- Halliday, M. K., &Hasan, R. (1976). Cohesion in English. London: Longman.

- Hawkins, R., &Bazergui, N. (1996). The developments of fluency in advanced learners of french. Applied Linguistics, 17 (1), 84-119.

- Hill, J. (2000). Revising priorities: From grammatical failure to collocational success. In M. Lewis (Ed.), Teaching collocation, 47–70.

- Hoey, M. (2005). Lexical priming: A new theory of words and language. London, UK: Routledge.

- Howarth, P. (1993). A phraseological approach to academic writing. In G. Blue (Ed.), Language learning and success: studying through English, 58-69. London:Macmillan.

- Howarth, P. (1998). The Phraseology of Learners' Academic Writing. In A. P. Cowie (Ed.), Phraseology : theory, analysis, and applications, 161-188. Oxford [England]; New York: Clarendon Press;Oxford University Press.

- Johnson, K & Johnson, H. (1999). Encyclopedic dictionary of applied linguistics. Oxford: Blackwell.

- Kasgari, A. (2013). Second Language Learning and Teaching in Iran.volum 89, 99-962

- Kellerman, E. (1983). Now you see it, now you dont. In Gass and Selinker (eds), Language transfer in language learning. Rowley, MA: Newbury House.

- Kennedy, G. (1998). An introduction to corpus linguistics. London: Longman.

- Kennedy, G. (2003). Amplifier collocations in the British National Corpus: Implications for English language teaching. TESOL Quarterly, 37, 467-487.

- Keshavarz, M. H. & Salimi, H. (2007), Collocational competence and cloze test performance: a study of Iranian EFL learners. International Journal of Applied Linguistics, 17, 81–92.doi: 10.1111/j.1473-4192.2007.00134.

- Khanchobani, A. (2012).Input enhancement and EFL learners' collocation acquisition. International journal of Academic research, 4(1), 96-101.http://www.researchgate.net.

- Koosha, M., &Jafarpour, A. A. (2006). Data-driven Learning and Teaching collocation of prepositions: The Case of Iranian EFL Adult Learners. Asian EFL Journal, 8(8), 200-216.

- Kuhn, T. (1970). The structure of scientific Revolution. 2nd ed. Chicago: University of Chicago Press.

- Laufer, B. &Waldman, T. (2011). Verb-Noun Collocations in Second Language writing: A Corpus Analysis of Learners' English. Language Learning 61, 2, 647–672.

- Lewis, M. (1993). The lexical approach.Hove, Language Teaching Publications.

- Lewis, M. (1997). Implementing the lexical approach: Putting theory into practice. London: Language Teaching Publications.

- Lewis, M. (2000). Teaching collocation: Further developments in the lexical approach. London: Language Teaching Publications.

- Lin, H. Y. (2003). The effect of collocation instruction on the reading comprehension of Taiwanese college students. Unpublished doctoral thesis, Indiana University of Pennsylvania, Pennsylvania.

- Lindstromberg, S., & Boers, F. (2009). ''The mnemonic effect of noticing alliteration in lexical chunks''. Applied Linguistics 29, 200-222.

- Liu, C. P. (1999a). An analysis of collocational errors in EFL writings. The proceeding of the eighth International Symposium on English Teaching, 483-494. Taipei: The Crane Publishing Co. Ltd.

- Liu, C. P. (1999b). A study of Chinese Culture university freshmen's collocational competence: "Knowledge" as an example. Hwa Kang Journal of English language & literature, 5, 81-99.

- Liu, C. P. (2000). A study of strategy use in producing lexical collocations. Selected papers from the tenth International Symposium on English Teaching, 481-492.Taipei: Crane.

- Liu, C. P. (2000a). An empirical study of collocation teaching, Proceedings of the Seventeenth Conference on English Teaching and Learning in the Republilc of China, (2000a), 23-25.

- Liu, C. P. (2000b). A study of Chinese culture university freshmen's collocational competence: 'Knowledge' as an example, Hwa Kang Journal of English Language & Literature, (2000b), 81-99.

- Magnúsdóttir, G. (1990) `Collocations in Knowledge Based Machine Translation,' in J. Pind and E. Rögnvaldsson (eds.), Papers from the Seventh Scandinavian Conference of Computational Linguistics, Reykjavík 1989, 204-207. Institute of Lexicography and Institute of Linguistics, Reykjavík.

- Manning, C. &Schutze, H. (1999). Foundations of Statistical Natural Language Processing. MIT Press, Cambridge, MA.

- Martelli, A. (1998). Lexical errors in EFL writing: a corpus-based approach. In J. Beekman (Ed.), Learning to write in a second language, 69-107. Cambridge, MA: Newbury House.

- Martin, M. (1984). Advanced vocabulary teaching: The problem of synonyms. The Modern Language Journal. 68(2), 130- 137

- McCarthy, M. J. (1984). A new look at vocabulary in EFL.Applied Linguistics, 5(1), 12-22.

- McCarthy, M. (1990). Vocabulary. Oxford: Oxford University Press.

- McCarthy, M. (1991). Discourse Analysis for Language Teachers, Cambridge University Press.

- McCarthy, M & O'Dell, F. (1994). English Vocabulary in Use Cambridge Cambridge University Press.

- McCarthy, M. & O'Dell, F. (2005). English Collocation in use. Cambridge: Cambridge University Press.

- McIntosh, M. (1961). Patterns and ranges. Language, 37 (3), 325-337.

- Meara, P. (1997). Classroom as lexical environments. In language teaching research h I, I, 28

- Morshali, F. (1995). A cross-sectional study of the acquisition of English lexical collocations by Iranian EFL learners. Unpublished M.A. thesis. Shiraz Islamic Azad University.

- Namvar, F. (2012).Analysis of collocations in the Iranian postgraduate students' writings. The Southeast Asian Journal of English Language Studies, 18(1), 11 – 22.3.

- Nation, I. S. P. (2001). Learning vocabulary in another language. Cambridge ; New York: Cambridge University Press.

- Nattinger, J. (1980). A lexical phrase grammar for ESL.Tesol Quarterly 14(3), 337-344.

- Nattinger, J. R. &DeCarrico, J. S. (1992). Lexical phrases and language teaching. New York: Oxford University Press.

- Nesselhauf, N. (2003). The use of collocations by advanced learners of English and some implications for teaching. Applied Linguistics, 24, 223-242.

- Nesselhauf, N. (2005). Collocations in a learner corpus.Amsterdam ; Philadelphia: J. Benjamins Pub. Co.

- Oldin, T. (1989). Language transfer: Cross-linguistic influence in language learning .Cambridge University Press.

- Palmer, H. (1930). Second Interim Report on English Collocations. Tokyo: Department of Education.

- Palmer, H. (1933). Second interim report on English collocations. Tokyo, Kaitakusha.

- Pawley, A. &Syder, F. H. (1983). Two puzzles for linguistic theory: Nativelike selection and native like fluency. In J. C. Richards & R. W. Schmidt (Eds.), Language and communication, 191-226. New York: Longman.

- Prodromou, L. (2003). Collocation. Retrieved March 16th, 2005, from the Language Study section of the Macmillan Essential Dictionary Webzine, published by Macmillan Publishers.

- Redman, S & Ellis, R. (1991). A Way With Words Cambridge. Cambridge University Press Rudzka.

- Rezvani, E. (2011).The effect of output requirement on the acquisition of grammatical collocations by Iranian EFL learners. Journal of Language Teaching and Research, 2(3), 674-682.

- Richards, J. C. (1971). A non-contrastive approach to Error Analysis. English Language Teaching Journal, 25, 204-219.

- Richards, J.C., &Bohlke, D. (2011). Four corners. Cambridge: Cambridge University Press.

- Ringbom, H. (1987). The role of the first language in Foreign LangusgeLearning.Clevedon: Multilingual Matters.

- Robins, R. (1967). A short history of linguistics. London: Longman.

- Sadeghi, K. (2009). Collocational Differences Between L1 and L2: Implications for EFL learners and teachers. TESL Canada Journal. 26(2), 100-124.

- Shalev, N. (2000). Collocations. In J. Morley (Ed), Current perspective on language learning, 105-141. New York, NY: Greenwood Press.

- Shin, D. & Nation, P. (2007).Beyond single words: the most frequent collocations in spokenEnglish.ELT Journal, 62/4.Published by Oxford University Press.

- Shokouhi, H. &Mirsalari, GH. (2010). Collocational knowledge versus general linguistic knowledge among Iranian EFL learners. Teaching English as a second or foreign language. 13(4), 1-24 http://tesl-ej.org/pdf/ej52/a7.pdf (september16, 2010).

- Shook, D. (1994). FL/L2 reading, grammatical information, and input-to-intake phenomenon. Applied Language Learning 5, 57-93.

- Sinclair, J.M. (1966) 'Beginning the study of lexis'. In Bazell, C.E., Catford, J.C., Halliday, M.A.K. and Robins, R.H. (eds.) (1966). In Memory of J.R.Firth.London: Longman.

- Sinclair, J. M. (1991). Corpus, concordance, collocation. Oxford, UK: Oxford University Press.

- Smith, C.(2005). The lexical approach: Collocation in high school English language learners. George Fox University.

- Swain, M. (1985). Communicative competence: some roles of comprehensible input and comprehensible output in its development. In S. Gass, and C. Madden (Eds.), Input in Second Language Acquisition. Rowley: Newbury House, 235-253.

- Swain, M. (1995). Three functions of output in second language learning. In: G. Cook, and B. Seildhofer (Eds.), Principles and Practice in Applied Linguistics: Studies in Honor of H.G. Widdowson. Oxford: Oxford University, 125-144.

- Swain, M. (2000). The output hypothesis and beyond: mediating acquisition through collaborative dialogue. In: J. P. Lantolf, (Ed.), Sociocultural Theory and Second Language Learning. Oxford: Oxford University Press, 97-114.

- Swain, M. (2005). The output hypothesis: theory and research. In: E. Hinkel, (Ed.), Handbook on Research in Second Language Teaching and Learning. Mahwah: Lawrence Erlbaum, 471-484.

- Taiwo, R. (2001). Lexico-semantic Relations Errors in Senior Secondary School Students' Writing. In Nordic Journal of African Studies. Vol. 10. No. 3 / 76.

- Wang, C. S. (2001). A study of the English collocational competence of English majors in Taiwan, 98. A Master's Thesis Submitted to English Department of Fu Jen Catholic University.http://www.collocation.fujcu.html.

- Williams, G. C. (1999). Les réseauxcollocationnelsdans la construction etl'exploitation d'un corpus dans le cadre d'unecommunauté de discoursscientifique, PhD thesis, Université de Nantes, 337 p.

- Willis, Y. (1998).Teaching collocations for productive vocabulary development, 25-33. Paper presented at the Annual Meeting of the Teachers of English to Speakers of Other Languages. NewYork, NY. (ERIC Document Reproduction Service No. ED457690).

- Willis, D. (1990). The Lexical Syllabus. London: Harper Collins.

- Wood, M. (1981). A definition of idiom. Manchester, England: Center for Computational Linguistics, University of Manchester.

- Wray, A. (2002). Formulaic language and the lexicon. Cambridge, UK: Cambridge University Press.

- Wu, W. S. (1996). Lexical collocations: One way to make passive vocabulary active, 461-480. Papers from the eleventh conference on English Teaching and Learning in the Republic of China. Taipei: The Crane Publishing Co. Ltd.

-Zhang, X. (1993). English collocations and their effect on the writing of native and non-native college freshmen, Unpublished PhD thesis Indiana University of Pennsylvania.

- Zinkgraf, M. (2008). V+N miscollocations in the written production of university level students. Elia, 8, 91-116.

Dictionaries

- Collins COBUILD Advanced Learner's English Dictionary. 5[th]ed. Glasgow: HarperCollins, 2006.

- Oxford Advanced Learners Dictionary. 8th ed. Oxford University Press, 2013.

- Oxford collocations dictionary for advanced learners of English. (2002). Oxford: Oxford University Press.

- Oxford collocations dictionary (2009) Oxford University press, Great Clarendon Street, Oxford, OX2 6DP.

Appendix 1: Michigan proficiency test

Michigan Proficiency Test

Fill in the squares on your answer sheet that corresponds to your answer.

cloze

In the US, industries that generate hazardous wastes want to dispose of them as cheaply as possible. Private companies hired to dispose of this waste compete with each other to offer the lowest prices to these industries. The government does not get involved, beyond setting minimum safety standards.

Unfortunately, the __ (1)__ of companies that generate and dispose of waste is to save money, __(2)__ to guarantee safety. These companies usually send waste to landfills because this is cheaper than recycling or incineration. Disposal firms who want to increase their business must cut corners to lower costs and __ (3)__ customers. At the same time, relatively __(4)__ is done to reduce the volume of waste generated, because disposal costs __(5)__ relatively modest.

Things are different in Denmark. There the government __(6)__ in the waste disposal process beginning __(7)__ the front end. Together with industry, the government formed a corporation to establish and __ (8)__ waste disposal facilities. This company, called Kommunichem, has a __(9)__ on waste disposal. Generators of hazardous waste ___ (10)__ ship their waste to one of Kommunichem's disposal facilities. In this system, there is no price competition in the waste disposal business.

(1) a. solution   b. license   c. importance   d. goal

(2) a. not   b. just   c. besides   d. something

(3) a. survive   b. efficient   c. gain   d. prosper

(4) a. more   b. this   c. recycling   d. little

(5) a. still   b. have   c. remain   d. cheap

(6) a. interferes   b. involves   c. participates   d. control

(7) a. to   b. by   c. of   d. at

(8) a. operate   b. prepare   c. found   d. generate

(9) a. power   b. profit   c. monopoly   d. responsibility

(10) a. help   b. disposal   c. take   d. must

Grammar

11. "Did you find out anything more about the fire?"

"If I do, you will be the first person_____."

  a. to know   b. will know

  c. knowing   d. who is knowing

12. "who sent you the letter?"

  " The university I graduated _____ last Spring."

  a. of   b. by

  c. at   d. from

13. "I found these books. Do you need them?"

  "Oh yes, those are the ones I _____earlier."

  a. was looking for them   b. looking for

  c. am looking for   d. was looking for

14. "I haven't been to New York yet."

  "Neither _____."

  a. haven't we   b. we have

  b. have we   d. we haven't

15. "The building's nearly finished, isn't it?"

  "Yes, but it'll be _____ we can move in."

  a. too much time till   b. a long time before

  c. hardly time when   d. very soon that

16. "Do you mind if we schedule the meeting for 11 o'clock?"

  "Well, actually, I _____ earlier."

  a. should prefer it will be   b. am preferring it to be

  c. will prefer it   d. would prefer it to be

17. "How fast was the car traveling?"

  "About 50 _____."

  a. kilometers per hour   b. kilometer per hours

c. kilometer per hour   d. kilometers per hours

18. "Did Jeff pass the test?"

  "No, _____ he studied hard, he didn't."

  a. despite   b. even

  c. although   d. however

19. "Why did you ride your bike today?"

  "It's more _____ than driving my car."

  a. economical   b. economic

c. economy   d. economically

20. "This concert is really bad."

　　"Yes, it's _____ worse than I expected it to be."

　　a. more   b. little

　　c. lot   d. much

21. The car was completely _____ in the accident.

　　a. wounded   b. wrecked

　　c. revoked   d. impaired

Vocabulary

22. Jones has _____ his job and will no longer be working here.

　　a. abstained   b. disclosed

　　c. expired   d. resigned

23. He preferred a _____ life as an artist to a secure job in a blank.

　a. precarious   b. cordial

　　c. complementary   d. precise

24. Planning a meal for 500 people is no _____ matter.

　　a. unanimous   b. trivial

　　c. dimensional   d. obstinate

25. The wall of the container began to _____ as we filled it with water.

　　a. bulge   b. surge

　　c. yearn   d. gasp

26. Her children look very healthy, because she's careful to give them _____ food.

　　a. indulgent   b. ambitious

　　c. harmonious   d. nutritious

27. Many world famous _____ ran in the race.

　　a. runaways   b. splinters

　　c. personnel   d. athletes

28. She is too _____ to hide what she thinks about them.

　a. pretentious   b. outspoken

c. apologetic   d. broadminded

29. Little Joey must be very sleepy; look at his eyes closing and his head _____ .

　　a. nodding   b. grinning

　　c. posing   d. propping

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30. She hurriedly _____ over the rocks to get a better view.

   a. sauntered   b. clambered

   c. trickled   d. plodded

Reading

There are many causes of headaches, and most people suffer them at some time or other. Although doctors have come a long way from the old days, when headaches were ascribed to evil spirits and treatments ranged from cutting out part of the skull to concoctions of cow brain and goat dung, they are still not sure what sets off headaches.

The most significant advance has been the acceptance that they are not the result of emotional stress. Until recently, many doctors thought that imbalances in the body's systems were to blame, but experts now believe it is the brain itself. They point to malfunctioning chemicals, such as serotonin, whose job it is to send messages to regulate the contraction and dilation of blood vessels in the brain.

Monosodium glutamate, a flavor enhancer used in Chinese cooking, can cause headaches in some people, as do many other common foods. Red wine, aged cheese, coffee, chocolate, nuts, and preserved meats contain nitrates, caffeine, and tyramine, chemicals that may produce pounding headaches.

Even though the exact culprit has yet to be found, there are plenty of treatments for prevention or cure. Over-the-counter preparations such as aspirin are fine for treating the occasional headache, but often exacerbate severe cases. Beta lockers, usually used for lowering blood pressure, seem to head off migraines. Antidepressants are effective, too. But doctors also recommend non-drug treatments such as relaxation techniques, which can be in combination with medication, and diet modification, to cut out foods that cause attacks.

31. According to the passage, many years ago, one way doctors tried to cure headaches was by................

a. praying to spirit.   b. sacrificing cows and goats.

c. operating on the patient's head.   d. writing prescriptions.

32. It is no longer believed that headaches are caused by ....

a. emotional stress.   b. malfunctioning chemicals in the brain.

c. certain kinds of foods.   d. contraction and dilation of blood vessels.

33. According to the passage, doctors now believe that headaches are related to ....

a. imbalance in the body's systems.   b. chemicals in the brain.

c. emotional stress.   d. high blood pressure.

34. According to the passage, beta blockers can be used to ....

a. treat migraines.   b. cause migraines.

c. contract blood vessels.   d. treat depression.

35. According to the passage, severe headaches cannot be successfully treated by ....

a. beta blockers.   b. aspirin.

c. relaxation techniques.   d. serotonin.

Collocation Test

Choose the correct answerthat can best collocate with the **bold words**.

1. His latest **album** ………… in the spring.

a) emerges   c) comes forth

b) appears   d) comes out

2. The **anniversary** of the founding of the charity……….. on the 12th of November.

a) falls   c) turns up

b) happens   d) takes place

3. The local authority runs an **advice** ……….. in the town.

a) house   c) corporation

b) center   d) enterprise

4. The prime Minister was ……….. **fire** in parliament for his handling of the budget.

a) under   c) on

b) in   d) at

5. He studied his books ……….. his father's **advice**.

a) at   c) on

b) under   d) in

6. I've always had a certain **fondness** ……….. her.

a) towards   c) of

b) for   d) in

7. Obviously there wasn't any **point** ……….. waiting longer.

a) for   c) at

b) in   d) on

8. Education has become an important **campaign** ………..

a) issue   c) subject

b) topic   d) problem

9. **Communication** between the two sides has …………

a) broken down   c) collapsed

b) seized up   d) failed

10. **Business** is………..for estate agents in the south as the property market hots up.

a) booming   c) expanding

b) growing   d) prospering

11. The ……….. of **government** is usually the effective ruler of the country.

a) head   c) president

b) chief   d) leader

12. The stereo phonic earphones can be used **in connection** ……….. the new sound system.

a) to   c) of

b) with   d) by

13. It's cheaper if you book the ticket ………… **advance**.

a) at   c) in

b) on   d) by

14. The value of property almost doubled during the **interim** …………

a) term   c) period

b) space   d) interval

15. He has survived several **assassinations**…………

a) ventures   c) trials

b) attempts   d) efforts

16. She was chosen in **preference** ……….. her sister.

a) to   c) over

b) for   d) upon

17. He managed to find a job ……….. an **agency**.

a) via   c) through

b) on   d) by

18. He fell down the steps like a **ball** ……….. on the ground.

a) wheeling   c) rotating

b) rolling   d) revolving

19. There is no need to do anything ……….. **a while**.

a) in   c) on

b) for   d) within

20. The **blame** …………. the police, who failed to act quickly enough.

a) lies on   c) sits on

b) lies with   d) falls on

21. Frenetic diplomatic activity is now ……….. **way** in at least half a dozen capitals.

a) due to   c) under

b) on   d) into

22. A visit to the flood-stricken area seemed ………… **order**.

a) on   c) at

b) under   d) in

23. I was aware of a real **generation** ………… between us.

a) difference   c) gap

b) distance   d) breach

24. After the bomb, an uneasy **calm** ……….. on the city.

a) settled   c) reposed

b) rested   d) resided

25. He suffered from severe **language** ………….

a) failure   c) impairment

b) damage   d) weakness

26. The **clock** on the mantelpiece ……..….. twelve o'clock.

a) said   c) pronounced

b) told   d) suggested

27. The high walls give the garden **protection** ……….. the wind.

a) from   c) to

b) against   d) of

28. I had great **admiration**……….. her as a writer.

a) of   c) on

b) for   d) towards

29. There was enough evidence that he broke the cup ……….. **purpose**.

a) by   c) on

b) with   d) in

30. **Convention** ……….. that dangerous physical action is the part of heroes, not Heroines.

a) orders   c) dictates

b) decrees   d) commands

31. This **color** ……….. so wash the shirt separately.

a) stretches   c) spreads

b) runs   d) extends

32. What is the …………. of **inflation** in your country?

a) amount   c) level

b) height   d) rate

33. The date of her birth is ……….. **record** in Leon Country, Florida.

a) in   c) at

b) by   d) on

34. Many scientists believe that there is a need for greater **concentration** ………..

environmental issues.

a) over   c) at

b) on   d) about

35. She now has **authority** ……….. the people who used to be her boss.

a) on   c) at

b) over   d) upon

36. Nobody refused for **fear** ……….. losing their job.

a) of   c) on

b) from   d) over

37. Three building were bombed last night in an **air** ………… on the city.

a) strike   c) assult

b) brush   d) storming

38. The extension will provide 600 square meters of new **gallery** ……….

a) area   c) scope

b) gap   d) space

39. If a liquid or a gas is kept ………… **pressure**, it is forced into a container so that when

the container is opened, the liquid or gas escape quickly.

a) in   c) with

b) under   d) at

40. She had little **success** ……….. getting new customers.

a) with   c) in

b) on   d) at