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The Use of Adjective+noun Collocations by Iranian EFL Learners Based on Noun Abstractness

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Abstract

To become proficient language users, EFL learners must be familiar with the accepted and highly used word combinations. Lewis (1997, p.8) contended that competence and proficiency in a language equals acquiring fixed prefabricated items. Collocations are a large part of these word pairs and are defined as "the way in which words co-occur in natural text in statistically significant ways". He believed that one of the most important subtypes of collocations is adjective + noun. The present study focused on the use of adjective + noun collocations by Iranian EFL learners based on noun abstractness. So, these collocations in written productions of twenty eight students at Hakim Sabzevari University were found and analyzed. The repetitions of high frequent patterns were compared to their frequency in COCA corpus in order to find out whether noun abstractness is a significant factor in learning and using adjective + noun collocations. The results revealed that the adjective + abstract noun collocations were more frequently and more efficiently used by Iranian EFL learners.

Keywords: Corpus-based study, Learning collocations, Highly-used collocations, EFL writing

1. Introduction

Learning a language is the result of many competences grouped together; hence, we should work on all these aspects to learn the whole language. However, the focus of many EFL classes is on the grammar with the cost of neglecting vocabulary. In 1990s, researchers including Krashen (1982) agreed that vocabulary is as significant as language structure regarding language acquisition. Along with this argument, scholars devoted themselves to the improvement of vocabulary instruction and more and more attention has been paid to its different aspects. One of these aspects is word combinability which is a particular part of vocabulary learning that is attracting more attention than before. Word combinations are usually referred to as formulaic language within the area of vocabulary research.

A large part of word combinations are collocations. As a matter of fact, EFL learners at higher levels usually possess good grammatical competence and get high grades in grammar test. However, they cannot construct a good and natural speech and writing mostly due to their lack of knowledge about what a word can be accompanied with. Firth (1957) was the first researcher who studied collocations and provided a definition for them. He defined collocations as "the company a word keeps" and to him, collocations of a given word are "statements of habitual or customary places of that word (p.181)". Since then scholars and researchers of different fields of study proposed various definitions and categorizations of collocations.

For the purpose of this study, collocations were defined and classified based on Lewis' (1997:2000) structural approach. He emphasized on seeing these word pairs in larger, more holistic ways and stated that "instead of words, we consciously try to think of collocations, and to present these in expressions rather than trying to break things into ever smaller pieces." He classified collocations into two major types: lexical collocations and grammatical collocations.

Hill and Lewis (1997) in the dictionary of selected collocations listed the most important and most probable collocations. They believed that storing these selected collocations in your memory is one of the most important ways to build an effective vocabulary and to make your English sound natural. The first item in their list was adjective + noun word pairs that constitute a subtype of lexical collocations.

Also in another study, the researchers of the present study investigated the use of lexical collocations among Iranian EFL learners and found that these types of collocations (i.e., adjective + noun) were used in greater number and higher frequencies in their writings. Therefore, the learning of this subtype of lexical collocations among EFL learners was further investigated with paying attention to the nature of noun in these constituents.

There are different ways to classify English nouns, one of which is based on their concreteness. Concrete concepts usually have core physical referents, such as table, bird, or person, whereas abstract concepts, such as justice, civilization, or consultation, are usually represented as situations or scenarios with a number of key elements (Barsalou, 1999; Barsalou and Wiemer-Hastings, 2005). Abstract concepts and concrete concepts are

represented and processed differently. It is generally believed that that learning would be faster with concrete than with abstract nouns in any word combination since they have physical referents. Moreover, studies have shown that abstract concepts do not readily evoke features such as color, shape, or texture as do concrete concepts (Graesser & Clark, 1985; Markman & Gentner, 1993).However, it has not been investigated particularly about collocations. This study intended to investigate Iranian EFL knowledge of adjective + noun collocations and how frequent they are used in their writings based on the abstractness of noun.

1.1 Problem Statement

Collocations are believed to be one of the most important aspects of language learning. Collocations sound natural to native speakers but students of English have to make a special effort to learn them. Many scholars such as Lewis (2000), Nation (2011), Nattinger and Decarrico (1992) and Thornbury (2002) have underlined the importance and benefits of collocations. They have also mentioned that collocations are essential for EFL learners to boost their communicative competence, enhance their fluency, be native-like and maintain lexical cohesion. One should learn to apply a great number of fixed expressions to achieve high proficiency in language learning. Acquiring collocations and becoming familiar with them is particularly a fundamental part of learning to write for academic purposes.

Sadeghi (2009) suggested that a significant part of Iranian EFL learners' problems with producing the language, especially at lower levels of proficiency, can be traced back to the areas where there is a difference between source- and target-language word partners. So it can be concluded that different linguistic background results EFL learners to perform differently when it comes to combining words in speech or writing. In addition, the first language of Iranian learners that is Persian greatly influences their use of collocations. Although much has been said about the acquisition of collocations by EFL learners who come from various cultural backgrounds in various countries (Gitsaki, 1999), very few studies have explored the collocational knowledge of Iranian EFL learners.

The concept of "collocational competence" was coined by Lewis (2000, p.49) who said: "We are familiar with the concept of communicative competence, but we need to add the concept of collocational competence to our thinking." Collocational competence is the ability to accurately combine different chunks of language to create acceptable collocations. This study focused on the collocational competence of Iranian EFL learners and the frequency of their use of different types of collocations which is a principal step to deal with their problems regarding the use of collocations. In other words, the first problem that is issued by the present research is the lack of knowledge about Iranian EFL students' collocational competence. The second problem that was attempted to be dealt with was that only a few studies attempted to discover the relationship between concreteness of noun in adjective + noun word pairs and their use by EFL learners. Previous studies emphasized that this subtype of lexical collocations are highly used and in turn not using and comprehending them creates a lot of problems for EFL students (Ganji, 2012).

The effect of noun concreteness on learning and use of word combinations has always been a

popular variable in literature. Yet no corpus-based research was conducted to show how easy it was for EFL learners to recall and use adjective + noun collocations as a function of noun concreteness or how frequent they are used in their writing compositions.

Corpus-based research analyze a principled collection of naturally occurring texts with the help of computers in order to find answers for many research questions related to almost every area of linguistics. Learner corpus that are composed of the speech or writing of people who are learning a language are very beneficial for the researchers of the field of vocabulary instruction. In the same way, the actual performances of EFL students in a course of essay writing were collected. This resulted in a learner corpus of 20,000 words. The Contemporary Corpus of American English (COCA) was also used (http://corpus.byu.edu).

1.2 Objective of the Study

This research mainly attempted to provide frequency information on the learning and use of adjective + noun collocations as a function of noun abstractness. It also tended to investigate and compare their use with their natural real use in academic context for the sake of improvement of collocation instruction. According to Mindt (1995) and Kennedy (2003) frequency information leads to the identification of words or structures that are central in a language.

Different schools of linguists put forward neat and tidy definitions or labels of collocations; however, EFL teachers should not be restrained in their teaching of collocations. While it is important to teach, for example, collocations which are more restricted or which occur more frequently, teachers should have confidence in focusing on collocational use they see as relevant to the making of meaning in a particular context. Therefore, the aim of this study was to provide information on the highly used collocations since without such information it is difficult to decide what collocations should be thought or highlighted when teaching vocabulary to EFL students.

As a result, the three following research questions were raised and answered in the present study on the use of adjective + noun collocations by EFL Iranian learners;

1. Is noun abstractness a significant factor in learning and using adjective + noun collocations among Iranian learners?
2. Does the frequency distribution of produced patterns of adjective + noun collocations match that of real language use when noun abstractness is taken into account?
3. What were the nouns that were most frequently accompanied by an adjective and formed a collocation in learners' compositions?

1.3 Significant of the Study

Since collocation learning and teaching are very important and they occupy a noticeable part of language learning and proficiency, conducting a study to discover the use of highly used patterns of collocations could be very helpful. Not only EFL teacher but also students could benefit from such study. The most significance purpose of this study is to assist Iranian EFL teachers in assessing language needs of their students. Being aware of the role of abstractness

in the learning adjective + noun collocation helps them to focus and emphasize on the highly used and most important collocations. Additionally, as a consequent of being informed about a better presentation of collocations, EFL teachers could manage the class time by increasing the time of discussion about acceptable adjective + noun collocations. It is also hoped that the findings of the present research helps Iranian EFL learners, particularly when the purpose of a course is preparing students to be competent writers. One of the learners' challenges for writing is the use of collocations which are one of the most important dimensions of language learning because the way words combine in collocations is fundamental to all language use.

2. A Review of the related literature:

A search through psychological research shows that concreteness has always been a popular variable in literature; additionally, whether and why concrete words are easier to learn. It is mostly concluded that concrete words are easier to learn and recall. Furthermore, the two main theories that discuss this variable highlight two important reasons. The dual-coding theory was presented by Paivio first in 1971. He believes that concrete words activate perceptual memory codes in addition to verbal codes, and that's why they are easier to remember than abstract words. In an alternative context availability theory, proposed by Schwanenflugel, Harnishfeger, and Stowe (1988), concrete words are believed to be easier to process because they are related to strongly supporting memory contexts. On the other hand, it is said that abstract words are not easy to process since it is hard to think of a context in which they can be used. Even in the more recent studies, this issue has been discussed under different topics. For example, Oliveira, Perea, Ladera, and Gamito (2013) investigated the hemispheric differences in the processing of concrete and abstract words. The effects of word concreteness in working memory, is a topic of a study done by Mate, Allen, and Baques (2012).

The findings of these studies and other similar studies indicated that words which refer to easily perceptible entities co-activate the brain regions involved in the perception of those entities. As an instance, the motor cortex involved in executing the actions co-activate when action-related words are being processed. The findings of psychological research on concreteness formed a semantic theory in linguistics. According to this theory, the meaning of concepts depends on experiential and language-based connotations to different degrees. This was followed by attempts to provide concreteness ratings for different words. One of the biggest studies was undertaken by the English Lexicon Project (Balota, Yap, Cortese, Hutchison, Kessler, Loftis, Neely, Nelson, Simpson, & Treiman, 2007) that contains processing time for 40,000 words. The other mega-study by the British Lexicon Project (Keuleers Lacey, Rastle, & Brysbaert, 2012) has data for more than 28 thousand monosyllabic and disyllabic words.

Studies on concreteness opened another area of study and researchers investigated the learnability of abstract and concrete sentences. Begg and Paivio (1969) found that when concrete sentences were presented to learners, they were able to detect subsequent changes in meaning in the sentences better than changes in wording. On the contrary, for the abstract sentences, wording changes were detected with greater facility than were changes in meaning.

Therefore, it was concluded that unlike abstract sentences that are stored as verbal strings, concrete sentences are stored as visual images. However, Johnson, Bransford, Nyberg, and Cleary (1972) argued against this conclusion and pointed out that the abstract sentences used in their study were more difficult to comprehend than the concrete sentences. Also they stated that there was a problem with the subject-object reversals rule applied to the sentences in that it changed the meaning for abstract sentences less than for concrete sentences.

In an article, Pezdek and Royer (1974) aimed to demonstrate that the detection of meaning changes in abstract sentences can be increased by providing subjects with a treatment designed to increase comprehension of the sentences. They presented 16 abstract and 16 concrete sentences of a constant structure to 120 undergraduate students from the University of Massachusetts. Two types of changes were the same as those used in the Begg and Paivio study. The interpretations of the results by the authors of the article indicated that meaning changes were recognized at a higher rate than wording changes for both concrete and abstract sentences.

Other set of studies include investigations on influence of abstractness on learning of words. Butter (1970) handed a list of pairs of abstract or concrete words to the participants of his study. After they read the words, they were asked to take a recall test they were unaware of. They recalled a significantly greater number of concrete than abstract word pairs; consequently, Butter hypothesized that concrete words elicit imagery that enhances incidental learning.

In addition to word abstractness, Sheehan's (1972) study included the learning condition (incidental vs. intentional learning). Data analysis revealed that in the incidental learning situation, concrete words were more remembered than the abstract words. Nevertheless, in the intentional learning condition, participants remembered both abstract and concrete pairs. In an article, Kusyszyn and Paivio (1966) investigated the hypotheses that concreteness of nouns in adjective-noun pairs facilitated learning. 107 students were presented learning and recall trial with four lists of 16 adjective-noun paired associates constructed from controlled association data. The effect of the variable of abstractness was highly significant.

Only recently, studies were done by researchers targeting the knowledge of collocations among EFL Iranian learners. Some of these studies were an attempt to recognize the errors that are mostly made by them and also the sources of those errors (e.g., Sadeghi, 2009). The use of collocation strategies in the performances of learners was the aim a number of studies. Some investigations were done to examine different kinds of collocation instructions in order to find out better ways to teach them (e.g., Goudarzi & Moini, 2012).

Other series of studies intended to discover the possible connection between collocations and general language skills (e.g., Mohajeri & Ketabi, 2013). Nevertheless, the use of adjective + noun collocations by Iranian EFL learners based on noun abstractness has never gone under study. This study tried to take a step in the improvement of collocation instruction by conducting a corpus-based research under this topic.

3. Methodology

3.1 Participants

The subjects in this study were 30 EFL learners at Hakim Sabzevari University. They were male and female students of English major who were required to pass a essay writing course. Four essays on four different subjects were written and handed in by students during the semester as home works. By this, they practiced writing essays that were in accordance to the standard qualities of accepted academic essays. Therefore, they were corrected by the instructor and the students became aware of the errors they made. Their main purpose of learning English was to become proficient English users and to obtain educational degree. They were unaware of the purpose of study and they also did not receive special instructions on collocations. They all had to pass a concurrence exam of English to be placed in university; therefore, they had obtained an acceptable level of knowledge of vocabulary and structure of English.

3.2 Design

The present study is a documentary research since it is carried out using a collection of texts and a megacorpus of English. According to Leech (1991), a corpus is, of itself, a rich resource of authentic data containing structures, patterns and predictable features that are waiting to be unlocked by the human intelligence. Hunston (2005) pointed out that a "corpus will not give information about whether something is possible or not, only whether it is frequent or not." This study was designed in order to reveal some facts about the frequency of the use of adjective + noun collocation according to noun abstractness.

3.3 Tools

For the purpose of this study, three tools were used; two of which were collections of texts. Corpora have been used in ELT research for quite a number of years and they have had a profound and positive impact on the field. In order to provide a useful and appropriate tool for corpus studies such as the present study, an appropriate corpus must be selected. The Corpus of Contemporary American English (COCA) is used in this study. It is the largest free English corpus available online since 2008 which is known as a user-friendly and accessible corpus.

According to Davies (2009), this corpus has significant advantages over other free corpora in terms of vocabulary study. Firstly, the large size of COCA gives a sufficient patterning of English lexis and grammar, which will give an appropriate picture of word frequency in terms of how they are actually used. Secondly, the operation of COCA is so convenient that users do not need any special linguistic knowledge or computer technique to get access to all the resources. Thirdly, COCA has the benefit of being a balanced equally between its five registers of spoken, news, academic, fiction and magazine. Fourthly, the texts are classified in terms of time, enabling users to observe the diachronic change of American English for every five years since 1990. Lastly, COCA has the ability to show example sentences simultaneously with frequency searches. In addition to this corpus, a learner corpus was also used. A learner corpora is composed of the speech or writing of people who are learning a

language usually with the purpose of obtaining information about the differences between learners and native speakers. The learner corpus for this research was made up of 82 multi-authored final writing assignments by the participants of the study. They had to write four essays of at least 250 words on four different topics. The diversity of writers and topics provides good source for such study because it creates vocabulary variation.

It is almost impossible for non-native speakers to recognize which word pairs are actually collocations and to identify its type, so a collocation dictionary was also used. All the word combinations were looked up in Oxford collocations dictionary to figure out which of them were adjective + noun collocations. This dictionary is enriched with 170,000 collocation entries are mainly selected from the 100-million-word British National Corpus. The other good aspect of using collocation dictionary was that it also indicated the subtype of collocations.

3.4 Procedure

In order to study the collocational aspects of L2 competence, researchers directly investigated the use of collocations by learners. In the same way, the data for this research was gathered from written productions of a group of EFL learners. They were given four general topics that were narrowed down by them; (1)An essay about a discovery of men which has changed the style of working and living, (2)Description of yourself or an aspect of your life or someone close to you, (3)Discussion of a major problem in your country, and(4)Medicine industry of your country. They were required to utilize proper vocabulary for academic contexts and to use grammatically correct sentences. The collection of their texts resulted in a corpus of 19,527 words. They were first typed and saved in word format for easier management of texts. After reading them carefully, all possible adjective + noun collocations were underlined. Then, all the word pairs were checked in collocation dictionary to see if they were truly lexical collocations. The number of repetition of each pattern was added up. This resulted in a list of collocations that were divided into two groups; adjective + abstract noun, and adjective + concrete noun.

The data was entered and analyzed with the help of SPSS.16 software. To answer the first research question, each item was signified as belonging to the first group (i.e., adjective + abstract noun) or the second group (i.e., adjective + concrete noun). To answer the second question, the frequency of each item was checked in COCA corpus. Then, the derived data set were compared to find out the appropriateness of the use of adjective + noun collocations by Iranian EFL learners. They were compared using Wilcoxon signed rank test to find out whether they were students closer to their real language use when the abstractness of the noun was taken into account. For answering the third question, the data was arranged according to the number of repetition of each item (i.e., their tokens).

4. Results and Discussions

Analyzing the data with SPSS16 provided the following tables which lead to interesting results regarding the frequency of the use of adjective + noun collocations by Iranian EFL learners. Table 1 shows the type and the tokens of use for adjective + noun collocations

produced by the participants in their writing samples. It yields the following results;

Table 1. Frequency distribution of adjective + noun collocations used by learners

Group	Frequency of type	% of Total N	Frequency of token	Maximum	Mean
adjective + abstract noun	220	69%	333	12	1.50
adjective + concrete noun	99	31%	141	8	1.39
Total	319	100%	474		

1. Out of 319 items, 220 were collocations of adjective + abstract noun. Besides, 99 items were combinations of adjective + concrete noun, being much less than the number of adjective + abstract noun type. As a matter of fact, the first group occupied almost 70 percent of this type of collocations.

2. When the repetition of each item was taken into account, it was revealed that 333 of them were collocations that consisted of abstract noun accompanied with an adjective. Moreover, items which included concrete nouns were 141 ones and much lower than the first group.

3. By looking at the maximum of tokens and the mean of each group, it can be concluded that abstract nouns were not only higher in number and frequency but also they were individually used more often.

In order to compare the frequency distribution of the use of adjective + noun collocations with their current real use, the Wilcoxon signed rank test was applied.

Table 2. Test statistics for wilcoxon test for comparison of frequencies of adjective + concrete nouns in learner corpus and COCA corpus

	collocational frequency
Z	-.223
Exact Sig. (2-tailed)	0.816

The results derived from the test showed that the difference of the frequency of adjective + abstract noun that were used by the learners (M=1.37, SD=0.99) and COCA corpus (M=387.74, SD=666.9) was significant: p=0.00(two-tailed). This means that the frequency distribution of the use of this group of collocations by Iranian EFL learners were different from the authentic use of language. The same test was applied for adjective + concrete noun collocations.

Table 3. Test statistics for wilcoxon test for comparison of frequencies of adjective + abstract nouns in learner corpus and COCA corpus

	collocational frequency

Z	-8.633
Exact Sig. (2-tailed)	0.00

The results derived from the test showed that the difference of the frequency of djective + abstract noun that were used by the learners (M=1.50, SD=1.278) and COCA corpus (M=506.9, SD=965.7) was not significant: p=0.816(two-tailed). This means that the frequency distribution of the use of this group of collocations by Iranian EFL learners were not different from the authentic use of language. These two tables indicated that Iranian EFL learners are more competent in using adjective + noun collocations that contain an abstract noun.

In the next step, the frequency list of all the found patterns was prepared to find out what was the nature of the nouns that were most frequently accompanied by an adjective and formed a collocation in learners' compositions. In order of frequency, the words *life*, *problem*, *technology*, *effect*, and *time* were highly repeated with different adjectives. As an instance, the word *life* was repeated 13 times in the essays written by participants. These produced collocations consisted of *life* accompanied by 12 different adjectives, such as; *happy*, *good*, *hard*, and *healthy*. As a consequent, it was revealed that Iranian EFL learners were more competent in using collocations that contained an abstract noun.

5. Conclusions

It was concluded that Iranian EFL learners are more competent in using abstract nouns when it comes to adjective + noun collocations. In addition, they use such collocations with higher number of repetitions. The conclusion of this study is in a way in line with the findings of Ringborn (1998). He stated that EFL learners tend to use certain vocabulary items of high generality, such as *people* and *things*, with a very high frequency. Lorenz (1999) also noted that learners tend to modify adjectives more frequently than native speakers do, giving their discourse a sense of too much information.

Iranian EFL learners' use of adjective + concrete noun collocations was very different from real current language regarding the frequency. On the other hand, Iranian EFL learners' use of adjective + abstract noun collocations was not different from real current language regarding the frequency. Therefore, the issue of similarity to current use of collocations had relation with the nature of the noun; in other words, the frequencies of use among these two sources were different when the noun was abstract or concrete.

Consequently, it could be said that, a reason for Iranian EFL learners to use abstract nouns in high frequency with higher number of adjectives is that they attend to give a sense of vagueness and overstatement to their writing productions. This issue could be further investigated in different genres of writing. The results could also be compared to patterns of use of adjective + noun collocations in the essays written by students at different levels of proficiency.

References

Balota, D. et al. (2007). The English Lexicon Project. *Behavior Research Methods, 39*,

445–459.

Barsalou, Lawrence. (1999). Perceptual symbol systems. *Behavioral and Brain Science*, *22*(4), 577-660.

Barsalou, L., W., & Wiemer-Hastings, K. (2005). Situating abstract concepts. In *Grounding cognition: The role of perception and action in memory, language, and thought*. Cambridge, England: Cambridge University Press.

Begg, I., & Paivio, A. (1969). Concreteness and imagery in sentence meaning. *Journal of Verbal Learning and Verbal Behavior*, *8*(6), 821-827.

Butter, Johnna. (1970). Differential recall of paired associates as a function of arousal and concreteness-imagery levels. *Journal of Experimental Psychology*, *84*(2), 252.

Davies, Mark. (2009). The 385+ million word Corpus of Contemporary American English (1990–2008+): Design, architecture, and linguistic insights. *International Journal of Corpus Linguistics*, *14*(2), 159-190.

Firth, John. (1957). *A synopsis of linguistic theory*. Oxford: Blackwell.

Ganji, Mansoor. (2012). On the effect of gender and years of instruction on Iranian EFL learners' collocational competence. *English Language Teaching*, *5*(2), 123-133.

Gitsaki, Christina. (1999). Teaching English collocations to ESL students. *NUCB Journal of Language Culture and Communication*, *1*(3), 27-34.

Goudarzi, Z., & Moini, M. (2012, May 28). The effect of input enhancement of collocations in reading on collocation learning and retention of EFL learners. *International Education Studies*, *5*(3), 247-258.

Graesser, A, C., & Clark, L. F. (1985). *Structures and procedures of implicit knowledge*. Norwood, NJ: Ablex.

Hill, J., &Lewis, M (1997). LTP dictionary of selected collocations. Hove, England: Language Teaching Publications.

Hunston, Susan. (2005). *Corpora in Applied Linguistics*. Cambridge University Press.

Johnson, M. K. et al. (1972). Comprehension factors in interpreting memory for abstract and concrete sentences. *Journal of Verbal Learning and Verbal Behavior*, *11*(4), 451-454.

Kennedy, Graeme. (2003). Amplifier collocations in the British National Corpus: Implications for English language teaching. *TESOL Quarterly*, *37*(3), 467-487.

Keuleers, E. et al. (2012). The British Lexicon Project: Lexical decision data for 28,730 monosyllabic and disyllabic English words. *Behavior Research Methods*, *44*, 287-304.

Krashen, Stephen. (1982). *Principles and practice in second language acquisition*. Pergamon.

Kusyszyn, I., & Paivio, A. (1966). Transition probability, word order, and noun abstractness in the learning of adjective-noun paired associates. *Journal of Experimental Psychology*,

71(6), 800-805.

Leech, Geoffrey. (1991). The state of the art in corpus linguistics. In *English corpus linguistics: Studies in honour of Jan Svartvik*, 8-29. London: Longman.

Lewis, Michael. (1997). *Implementing the lexical approach: Putting theory into practice*. Hove, England: Language Teaching Publications.

Lewis, Michael. (2000). *Teaching collocation: Further developments in the lexical approach*. Hove, East Sussex: Language Teaching Publications.

Lorenz, Gunter. (1999): *Adjective intensification learners versus native speakers: A corpus study of argumentative writing*. Amsterdam: Benjamins.

Markman, A., B., and Gentner, D. (1993). Splitting the differences: A structural alignment view of similarity. *Journal of Memory and Language*, *32*(4), 517-535.

Mate, J., Allen, R. J., & Baques, J. (2012). What you say matters: Exploring visual-verbal interactions in visual working memory. *The Quarterly Journal of Experimental Psychology*, *65*, 395-400.

Mindt, Dieter. (1995). *An empirical grammar of the English verb: Modal verbs*. Cornelsen.

Mohajeri, M., & Ketabi, S. (2013, October). The knowledge and use of collocations and their relation with English speaking proficiency among upper-intermediate to advanced Iranian EFL learners. *International Electronic Journal for the Teachers of English*, *3*(5), 2-21.

Nation, Paul. (2001). *Learning vocabulary in another language*. Cambridge University Press**.**

Nattinger, J., & DeCarrico, J. (1992). *Lexical phrases and language teaching*. Oxford University Press.

Oliveira, J. et al. (2013).The roles of word concreteness and cognitive load on interhemispheric processes of recognition. *Laterality, 18*, 203-215.

Paivio, Allan. (1971). *Imagery and verbal process*. New York: Holt, Rinehart and Winston.

Pezdek, K., & Royer, J. M. (1974). The Role of comprehension in learning concrete and abstract sentences. *Journal of Verbal Learning and Verbal Behavior*, *13*, 551-558.

Ringborn, Hakan. (1998). Vocabulary frequencies in advanced learner English: A cross-linguistic approach. London: Longman.

Sadeghi, Karim. (2009). Collocational differences between L1 and L2: Implications for EFL learners and teachers. *TESL Canada Journal, 26*, 100-125.

Schwanenflugel, J., Harnishfeger, K., & Stowe, R. W. (1988). Context availability and lexical decisions for abstract and concrete words. *Journal of Memory and Language, 27*, 499-520.

Sheehan, P. W. (1972). *The function and nature of imagery*. Academic Press.

Thornbury, S. (2002). *How to teach vocabulary*. Harlow: Longman.