



The Enhancement of Lexical Collocation Learning Through Concordancing: A Case of Iranian EFL Learners

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ABSTRACT

Collocation is one of the most problematic areas in second language learning and it seems that if one wants to improve his/her communication in another language the collocational competence should be improved. The purpose of this study was to examine the effect of applying Collins Collocation Dictionary as a concordancing tool on learning lexical collocations of Iranian EFL university students. After selecting 30 students randomly, they were divided into 2 groups: experimental group and control group. A pretest was taken from both groups at the same time. In the following week concordancing practice (task1) was given to the students in the experimental group and they were asked to work with 10 lexical collocations and identify (mis)collocations. At the same time students in control group received some texts and they were asked to notice the lexical collocations. Then, posttest1 was given to the students in both groups. In the next week, the same procedure with 10 other lexical collocations was repeated and posttest 2 was administered. The results showed that the experimental group performed better on lexical collocations than the control group and their results were significant.

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Introduction

Second language acquisition researchers believe that vocabulary learning is the most important aspect of second language learning (Knight, 1994) and "an essential part of mastering a second language" (Schmitt, 2008; p.329). "While without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (Wilkins, 1972, p.111). In a broader area of language teaching, the lexical approach has received substantial attention in recent years which emphasizes on developing learner's proficiency with lexis or words and word combinations. According to this approach, an essential part of language acquisition is the ability to comprehend and produce lexical patterns and phrases as chunks and these chunks become the raw data by which learners perceive pattern of language traditionally thought of as grammar (Lewis, 1993).

Certainly, this approach distinguishes between group of individual words with fixed meanings and lexis, which involves not only single words but word combinations that are stored in our mental lexicon. Accordingly, the lexical approach has directed considerable attention to institutionalized utterances and expressions including collocations which is necessary to acquire native-like competence in Second Language (Lewis, 1997).

Native speakers have accepted collocations as normal part of their language without regard to grammatical relations between words. For example, a word such as 'blonde' collocates strongly with 'hair'. The word 'beige' collocates strongly with the word 'car'. But they cannot be collocated inversely to become 'beige hair' or 'blonde car'. Clearly it is difficult for non-native speakers to identify these collocations. For this reason, collocations have always been problematic parts of L2 Learning. Learning collocations has been a great challenge for non-native speakers who 'strive for a high degree of competence' (Wray, 2002; Nesselhauf, 2003) to enhance not

only fluency but also accuracy. Even when students move to advanced levels they cannot use collocations accurately and so they fail to communicate their meaning.

Thus, collocations should be given the same kind of status in our methodology as other aspects of language such as pronunciation, intonation, stress, and grammar (Hill, 2000). According to Nesselhauf (2003), teaching collocations as well as learners' difficulties with collocations have not been investigated in detail by EFL practitioners so far. Like other EFL learners, Iranian EFL learners, too, seem to have serious problems with the production of collocations, and yet such multi-word expressions have not been a major focus of teaching and research in our country.

However, the present study aims to focus solely on lexical collocations. One main reason is that grammatical collocations are 'more deterministic and more often found in dictionaries' while lexical collocations are 'more problematic' for L2 learners and also 'more difficult to find in dictionaries' (Čeh, 2005). Besides, the number of grammatical collocates is always limited while lexical collocates would seem impossible to be listed. Wei (1999) supports this view, arguing that lexical collocations encompass a wide range

of data. Due to the advancements in computer technology, innovative changes in English Language Teaching (ELT) have appeared. Learners are no longer confined to classroom language, but can now have access to language corpora or vast databases of authentic texts stored on computers or on the Internet. Concordancing is a tool of accessing a corpus of text to show how any given word or phrase in the text is used in the immediate contexts in which it appears. By grouping the uses of a special word or phrase on the computer screen or in printed form, the concordancer shows the patterns in which the given word in phrase is typically used (Pennington & Richards, 1997).

Quite a number of studies have suggested using concordancers to study collocation patterns in authentic texts (Hoey, 2000; Wang, 2002, Chang & Sun, 2009). The concordancer can search a selected word and list sentences or portions of sentences containing that word, called the Key-Word-In Context (KWIC). In this way, the lexical or grammatical items that collocate with the key word are sorted to the left and right side of the key word. It can also find collocations or words most often come together with the key word.

The researcher aims to explore whether concordancing is effective in learning lexical collocations (verb + noun, adjective + noun) by advanced Iranian EFL learners. Based upon the studies on concordancing the researcher can assume that learning lexical collocations via concordancing does help learners to maximize their range of lexical collocations in a short and long period of time. This study is an attempt to introduce Collins Collocation Dictionary (CCD), a sort of concordancer that assists learners in using this concordancer to develop their knowledge of English lexical collocations.

2. Literature review

According to Halliday (1966), language is organized in terms of lexico-grammatical features, rather than independent lexis or grammar. This perspective emphasizes the idiomatic nature of language, especially the dependent relationship between vocabulary and the grammatical system. Vocabulary items are not always single items or simply 'Content words'. They can involve multiword units, such as idioms, clichés or fixed expressions that have both a consistency of form and of meaning (Cruse, 1984).

Within the lexical approach special attention is directed to collocations and expressions that include institutionalized utterances and sentence frames and heads. As Lewis (1993) maintains, "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, there is a conscious effort to see things in larger, more holistic ways" (p.204). The notion of collocation is one of the favorite topics for those who follow the lexical approach—a school of thought that says language consists of grammaticalized lexis, not lexicalized grammar (Lewis, 1997).

Benson, Benson and Ilson (1986) categorized collocations into two major groups: Lexical collocations and grammatical collocations. Lexical collocations do not contain preposition, infinitive or relative clauses but consist of various combinations of nouns, adjectives, verbs and adverbs. Grammatical collocations consist of the main word (a noun, an adjective, a verb) with preposition. So the first six above categories are usually called lexical collocations and the other four are grammatical collocations.

Nakata (2006) mentioned learners have to acquire a large number of collocations to be able to produce and comprehend ideas accurately, fluently and naturally. Collocations are also an inherent problem for L2 learners. Because it takes years of exposure to a language for its native speakers to get the competence sufficient to acquire acceptable collocation knowledge, and that competence of collocation knowledge belongs to native speakers' intuition (McCarthy, 1990). It may be natural for L2 learners to have this area tricky and unmanageable for quite a long time. Learners' problem with L2 collocational use has been repeatedly reported, for example (Marton, 1997; Matsuno & Sugiura, 2002; Koosha & Jafarpour, 2006).

In an investigation of Polish learners' knowledge of collocations and their ability to use them, Marton (1997) used pre treatment and post treatment translation tests. The researcher used also two comprehension tests that included the same collocations used in the translation tests. However the results showed no significant differences in the participants' scores on the two translation tests, which confirmed learners' poor productive knowledge of collocations. Therefore, Marton concluded that limited exposure to collocations would not improve learners' productive knowledge of those structures.

Another study that confirmed the low collocational knowledge of EFL learners is Matsuno and Sugiura's (2002) study, which addressed the question of whether the collocational expressions of L1 Japanese learners' of English resemble those of native speakers. To answer this question, the researchers used 2 corpora: native speakers' corpora and Japanese learners' corpora to compare to compare the performance of the two groups. The college students who were asked to write about a certain topic as fast as possible. In this exercise, they were allowed to use dictionaries. The researchers' conclusions confirmed Japanese learners of English.

Another study that showed the difficulties language learners encounter learning English collocations is Koosha and Jafarpour's (2006) study. The research was done on 200 Iranian university students (in three universities in Shahrekord) majoring in English. The subjects were then randomly divided into two groups. One group underwent the conventional treatment on prepositions and their patterns in which preposition and their collocational patterns were explicitly thought to the participants in English or Farsi. The second group (experimental group) received a data driven based instruction (treatment) that was based on concordancing lines presented in KWIC format. Two completion tasks on collocation of prepositions were administered as yielded the following results. First, DDL approach proved to be highly effective in teaching and learning of collocation of preposition. Second learners' performance on collocation of preposition was shown to be positively related to their level of proficiency. Third, the analysis of errors of collocations indicated that Iranian EFL learners tended to carry over their L1 collocational patterns to their L2 production. Generally results revealed that the Iranian students lacked collocation knowledge. Therefore it seems that collocations are L2 learners' 'serious problem and this problem tends to be solved.

He remarks that the knowledge of collocations is an essential part of achieving native like competence in English, and if Iranian EFL learners want to achieve that competence, there will be no choice but to accept that the teaching collocations should be a part of their language instruction. It also should be pointed out that the neglect of collocation in EFL classroom should be a concern for teachers. Learner's lack of knowledge of collocational patterns makes them to be prone to all sorts of collocational errors.

EFL learners should be encouraged to make effective use of English dictionaries, especially the collocational dictionaries. Dictionaries such as Collins CoBuild English Dictionary and Oxford's Dictionary on collocations which were based on extensive naturally occurring data are good for acquisition of collocational properties of English lexical items.

Data Driven Learning (DDL) approach was originally proposed by Johns (1991), in order to describe the application of concordancing materials in EFL classroom activities. Through a

concordance and a corpus that is used as a database, teacher can help learners to make their own discoveries about language use. Learner's investigations of the concordancing lines will lead to unpredictable results. This kind of learning encourages the learner autonomy by training them to draw their own conclusions about language use. Data Driven Learning studies vast data bases of English texts (corpora) with software programs called concordancers, which isolate common patterns in authentic language sample. An example of concordance implementation in the classroom is the collocational concordancer. This means that pupils are shown several collocations in various contexts in order to give them an indication on how these collocations are used. As a result learners must pay attention to how words are used rather than to individual words themselves. Then it can be concluded that concordancing materials and DDL approach, which present the teaching materials through concordancing lines, provide a great potentiality to highlight collocations and collocational patterns in language.

3. Research methodology

3.1. Research questions

To achieve the purposes of the study, the following research questions have been posed.

1. Does concordancing have any significant effect on Iranian EFL learners as regards lexical collocation learning?
2. Is there any significant difference between the effects of concordancing and conventional method on the EFL learners lexical collocation learning?

3.2. Research hypotheses

To investigate the research questions of the present study, the following null hypotheses have been formulated:

1. There is no significant effect of concordancing on Iranian EFL learners as regards lexical collocation learning.
2. There is no significant difference between the effects of concordancing and conventional method on the EFL learners' lexical collocation learning.

3.3. Participants

The population for this study included learners of English as a foreign language whose first language was Persian. The study was conducted with 30 MA students learning English as a foreign language in Azad university of Najafabad, Isfahan. The researcher considered the range of their age between 25-30 years who were selected through random sampling. They participated in this project voluntarily. The researcher ensured participants that their personal information will be kept confidential. They were divided into two groups: an experimental and a control group. The experimental group consisted of 15 EFL learners who had computer skills and learnt lexical collocations via computer in a laboratory equipped with computers, and the control group included 15 EFL learners who learnt lexical collocations through conventional task i.e. reading texts.

3.4. Instruments

The instruments used in this study involve the development of materials for concordancing, the design of four tests for assessing the learners' knowledge of lexical collocations and the survey questionnaire. This study was procedural in that it was conducted in 5 weeks in order to examine the effect of concordancing on the development of L2 learners' knowledge of lexical collocations. The main instruments were four tests on lexical collocations. All tests were in the same format, with the same number of collocation errors and the same number of multiple choice items. All the tests consisted of two parts: The

first part contained 12 sentences in which the students should guess if the underlined verb or adjective is a true collocation for the underlined noun or not, and if it is not a true collocation they should write the correct verb or adjective that collocates with that noun. The second part of each test consisted of 8 multiple choice questions. Again, students should guess the true verb or adjective that collocates with the noun. These tests were taken from examples in Collins Collocation Dictionary and the lexical collocations in each structure were checked in Oxford Collocation Dictionary. All the tests were restricted to the verb +noun and adjective +noun collocations since empirical research shows these structures occupy about 50% and 25% of all lexical collocation mistakes in students' writing. In addition, selecting these two types of collocations is also for the matter of consistency in test design, test result analysis and discussion of findings. The reliability of the tests was calculated by KR-21 and it was 0.74, 0.79, and 0.83. Validity of the tests was judged by some EFL professors who had published articles in some reputable journals.

The software that experimental group worked with was a collocation dictionary in the form of concordancing called Collins Collocation Dictionary. It included 140000 English collocations and 2600000 real examples (authentic speech or writing) of how these word combinations are used. The collocations and the real examples were extracted from a corpus of 200 million words: the Bank of English.

3.5. Procedures

The procedures of the study can be summarized as follows: First, a brief training session was conducted for the students to raise their awareness of the importance of collocations, to develop their ability to recognize collocation patterns as well as collocation errors. The students were explained about key terms such as corpus, concordance, and concordancing. They were also given instructions on how to use CCD and how to do concordancing practice exercises. The procedures for both groups lasted for 5 weeks.

First the pre-test was administered to both groups without access to CCD. This pretest included 20 lexical collocations that 12 of them were in the form of sentences in which the lexical collocations were underlined and the next 8 collocations were multiple choice items. After that, in the following week the experimental group attended the site that was equipped with computers in which CCD was installed on them. Then concordancing practice task 1 was given to them. In this task 10 out of 20 lexical collocations in pretest was given to the students and they were asked to identify (mis)collocations. It is worth mentioning that some assistance was also given to students. After practicing lexical collocations, an immediate posttest1 was given to the students. Posttest1 was in the same format as pretest but included 10 lexical collocations other than those students had practiced in task 1. These 10 fillers were added in order to increase the reliability of test, but they were deleted in data analysis. On the other hand, the control group was given some texts taken from passages books which included the same 10 lexical collocations in task1, and they were asked to notice lexical collocations. Then the posttest 1 was administered to control group. After one week the experimental group again attended the site while concordancing practice task 2 was given to them and they kept practicing and working with CCD. During this process the control group again received some texts while they were asked to notice lexical collocations.

Table 1 Descriptive Statistics for the Experimental Group

	Mean	N	Std. Deviation	Std. Error Mean
pretest	9.13	15	1.922	.496
posttest	16.00	15	1.254	.324

Table 2 Paired-samples T-test Statistics for Pretest and Posttest Scores of the Experimental Group

	Paired Differences			t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean			
pretest - posttest	-6.867	2.100	.542	-12.665	14	.000

Table 3 Descriptive Statistics for the control and Experimental Groups

	group	Mean	Std. Deviation	N
pretest	control	9.13	1.685	15
	Experimental	9.13	1.922	15
	Total	9.13	1.776	30
posttest	control	11.13	1.642	15
	Experimental	16.00	1.254	15
	Total	13.57	2.861	30

Table 4 Multivariate Tests for the Effect of Time and Time*Group

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Time	Wilks' Lambda	.110	1.087E2 ^a	2.000	27.000	.000	.890
Time * group	Wilks' Lambda	.267	37.051 ^a	2.000	27.000	.000	.733

Then the post-test 2 was conducted on two groups to measure their performance after they received different treatments.

4. Data analysis and results

To see the effect of concordancing on lexical collocation learning and comparing the effect of learning through concordancing with conventional method, the tests were collected and scored while each correct answer carried one point. When all the four tests were scored, a paired-sampled T-test was conducted on the scores of the pre-test and post-tests of all the students to measure the effect of concordancing. Then Repeated Measures ANOVA was performed on the sub-scores of the pre-test and post-tests to measure the effect of concordancing on the students' performance. Descriptive statistics about test scores and survey questionnaires were also calculated and visually represented by tables and charts.

Regarding the first research question i.e. if concordancing has any significant effect on Iranian EFL learners as regards lexical collocation learning, the EFL learners' performance was assessed in the experimental group who were subject to separate instructional sessions. Since the same participants were examined across two tests, a paired-samples T-test was conducted to account for the mean score differences, i.e. the effectiveness of the collocation-based instruction. Across the 15 participants in this group, the mean scores increased about 7 points on average from the pretest to the posttest.

The standard deviations for the pre and post test conditions reveal that the scores in the pretest were more variable than the post instruction tests.

Finally, based on the results of a paired-samples t-test to evaluate the impact of instruction on the students' scores, there was a statistically significant increase in scores from Time 1 (pretest) ($M=9.13$, $SD=1.92$) to Time 2 (posttest) [$M=16$,

$SD=1.25$, $t(14) = -12.665$, $p < 0.05$]. The eta squared statistic (0.47) indicated a large effect size.

To address the second research question of the study, two independent-samples T-test were employed to assess the differences in the degrees of conventional and concordance teaching effectiveness on the learners' performance. As regards the pre and posttest records, due to the equality in the mean scores, the two control and experimental groups were completely homogeneous in terms of their participants' performance. Yet, the pretest scores in the experimental group were more varied than the control group with a higher standard deviation. Concerning the posttest records, the experimental group with a mean difference of about 7 points outperformed the control group.

Besides, in terms of the long term acquisition of collocations, the control group mean score fell about 2 points while for the experimental group this decrease reached a 4-point reduction.

Regarding the extents of difference in the performances across two control and experimental groups at pretest (prior to instruction), posttest (following the training), a one-way repeated measures ANOVA was conducted to compare the scores.

Accordingly, there was a significant interaction effect for group and time [Wilks' Lambda=0.267, $F(2, 27) = 37.05$, $p < 0.05$, multivariate partial eta squared = 0.733].

5. Discussion and conclusion

The study sought to examine the effect of concordancing on the students' performance in lexical collocation tests. The first research question addressed by this research was to see whether concordancing has any significant effect on Iranian EFL learners as regards lexical collocation tests. In addition, it was stated in

the first hypothesis that concordancing has no significant effect on Iranian EFL learners as regards lexical collocation tests.

Regarding the effect of concordancing, the findings have shown that having Collins Collocation Dictionary (CCD) as a concordancer produced significant effects on the subjects' overall performance in lexical collocation tests. The students were generally found to improve their scores significantly in lexical collocation tests when they had CCD as a concordancing tool compared to when they had no concordancing tool. In this regard, the study lends supports to previous studies that have found positive effects of concordancing as support for language learning (Chambers, 2005; Chan & Liou, 2005; Horst et al., 2005; Johns & King, 1991; Partington, 1998), and concordancing as support for collocation learning (Wang, 2002; Sun & Wang, 2003; Chang & Sun, 2009).

The second question of the research was whether there is any significant difference between the effects of concordancing and conventional method on the participants as regards lexical collocation tests. In addition, it was stated in the second hypothesis that there is no significant difference between the effects of concordancing and conventional method on the participants as regards lexical collocation tests. The results showed that there is a significant difference between the effects of concordancing and conventional method on the participants as regards lexical collocation tests. The result of the study is in line with Bahns (1993) which suggests, excessive exposures to huge amounts of linguistic data can enhance learners' sense of discovery learning and problem solving activities. The use of concordancing materials as a basis for developing models and descriptions of language showed to be among the most far-reaching achievements made in the realm of second/ foreign language instruction. The result of this study is also in line with Koosha and Jafarpour's claim (2006) that students who use a concordancer as a tool for learning collocations will outperform the students who learn collocations through conventional tasks.

With regard to the learners' learning style, the proven positive effects of concordancing in this study show that the learners can be suited to inducing collocation patterns from concordances by themselves. The improvement in the learners' test scores suggests that this type of 'discovery learning' or inductive approach can be especially effective for learning collocations. It is contrary to the deductive approach in which teachers have to introduce collocation patterns first and then give students sentences later. As Woolard (2000) argues, when it comes to teaching collocation, teachers could play a 'minor' role and it is not a case of 'teaching' mode.

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