14th International Language, Literature and Stylistics Symposium

Lexical collocational knowledge of Iranian undergraduate learners: implications for receptive & productive performance

Amir Hossein Torabian*a, Marlyna Marosb, Mohd Yasin Mohd Subakirc

aUniversiti Kebangsaan Malaysia, Bangi, Malaysia

Abstract

The present study intends to probe into the possible relationship between collocational competence and vocabulary knowledge of Iranian undergraduate learners. First, the participants were given a vocabulary test to identify their basic knowledge of common word meanings and to show how they can identify the meanings of words at different levels. Second, productive collocational test and a receptive collocational test were given to the participants to reveal the possible difference between the participants’ receptive and productive knowledge. As the results revealed, there was a significant difference between the receptive and productive lexical knowledge of the undergraduate learners. It was also revealed that there was a significant relationship between the collocational knowledge and the vocabulary knowledge of their learners.

© 2014 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/3.0/).

Keywords: lexical collocation; receptive collocation; productive collocation; vocabulary knowledge

1. Introduction

The present study attempts to probe into the possible differences between receptive collocational knowledge and productive collocational knowledge of Iranian EFL learners. At the same time, this study wishes to display the differences between vocabulary knowledge and the collocational knowledge of Iranian EFL learners. In this comparison the two indexes of collocational knowledge, that is, the receptive and productive collocatioanl

* Corresponding Author: Amir Hossein Torabian. Tel.: +989122519688.
E-mail: amir.ukm@gmail.com
knowledge are treated as a variable. In the field of second language acquisition and English as a Second/Foreign Language (ELS/EFL) education, little attention has been paid to collocations compared with other domains of language, such as vocabulary, grammar, and phonetics/phonology.

As the study of vocabulary has become a mainstream topic from the vantage point of language use and not language structure, many linguists have concentrated not on each word in a sentence but on the combination of words. As a result, collocation has become a particular domain of vocabulary research both theoretically and practically. The importance of collocations has been stated by researchers such as (Bahns & Eldaw, 1993; Bahns 1993; Channel, 1981; Lewis, 1993; Willis, 1990).

However, Mackin (1978) is somehow sceptical about the possibility of teaching collocations. He claims that it is not possible for ESL/EFL learners to learn such huge numbers of collocations. The impossibility of acquiring all collocation originates from the lack of collocational competence of ESL/EFL learners (Bahns, 1993). It is also related to their lack of intuition which is defined as the ability of native speakers in confirming rules of the grammar and the usage of language (Crystal, 1992).

The term collocation possesses various types of definition and is associated with different terms but it is not yet definitely defined. Kjellmer (1995) and Benson et al., (1986) present a definition which is based on an operational approach reflecting the procedures which are employed to extract collocations from language corpora data.

In the linguistic approach, collocation is defined as a completely specific phenomenon. For instance, Wood (1986) proposes an area of language from productivity to frozenness by considering of native speakers. Wood (1986) treats productivity of form for phrases and semantic compositionality as factors constituting a continuum ranging from total frozenness to complete freedom of linguistic combination.

Although various terms are used such as 'phraseological units' (Ginzburg et al., 1979), 'word-combination' (Akhmanova, 1974; Cowie, 1994), and 'phrasal lexeme' (Lipka, 1990), are used, researchers are totally investigating the same phenomenon. They are investigating role of patterning of words and phrases or chunks in language processing, communication, first and second language acquisition, language loss, etc. therefore, in this study the term collocations and the other terms referring to formulaic language are interchangeably.

It is possible to classify collocations into two subtypes as grammatical and lexical collocations (Benson, 1985). Lexical collocations are composed of two constituent parts such as verb + noun, adjective + noun. Whereas grammatical collocations are made of either a dominant word such as a verb, a noun or an adjective and dependent word like a preposition. Grammatical collocations are sometimes made of a particular structural pattern, like a dative- movement transformation such as to+ infinitive + gerund or they can also be made of that-clause.

2. The study

This study is conducted with the following objectives:

1- To find the possible differences between the Iranian undergraduate learners' productive and receptive lexical collocational knowledge.

2- To discover any relationship between the vocabulary knowledge and the English lexical collocational knowledge of Iranian undergraduate EFL students

3. Methodology

3.1. Participants

The participants in this study were 110 students majoring in English at the Department of Language and Literature at University of Qom. The subjects' mean age was calculated and it was 24 years. Their language proficiency as measured by Oxford Placement Test was upper intermediate. Their GPAs' in reading comprehensions and writing courses exceeded 16 out of 20. These participants were both male and female students. Their L1 background was Persian (Farsi) and had at least four years of second language learning.
experience. None of the participants had received any specific instruction in English collocation and they were not much aware of collocational competence as a dimension of second language knowledge and competence.

### 3.2. Instruments

The first instrument was Oxford Placement Test (2004) which was used for measuring the participants’ level of language proficiency. Another instrument the participants took was a receptive test of English lexical collocation (Haqiqi, 2007). The items tapped different types of lexical collocations that is, noun+noun, verb+noun, etc. The test proved to be highly reliable producing reliability estimate of .92. Another instrument used was a productive English collocation test (Haqiqi, 2007). The test was highly reliable and produced reliability estimate of .89. The third instrument used was a standard vocabulary test; Vocabulary Level Test also known as Vocabulary Size Test (Nation, 1990). This test was designed to estimate test takers’ basic knowledge of common word meanings, and, specifically, the extent to which they know the common meanings of words at different levels, that is, the 2,000, 3,000, 5,000, 10,000 and university word levels. Nation’s (1990) Vocabulary Levels Test (VLT) is a suite of five tests, with the total of 30 items at four different word frequency levels plus the Academic Word List (AWL). The items of the test are relatively straightforward. They are made up of sets of six words and three definitions.

### 4. Data analysis

#### 4.1. Research Question 1

Is there a significant difference between productive and receptive lexical English collocational knowledge of the Iranian undergraduate EFL learners?

A paired-samples t-test was run to compare the EFL learners’ mean scores on productive and receptive lexical English collocations. As displayed in Table1 the EFL learners showed a higher mean score (M = 17.70, SD = 5.56) on the receptive lexical English collocation than productive lexical English collocation (M = 13.84, SD = 7.59).

<table>
<thead>
<tr>
<th>Tests</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receptive</td>
<td>17.70</td>
<td>110</td>
<td>5.561</td>
<td>.530</td>
</tr>
<tr>
<td>Productive</td>
<td>13.84</td>
<td>110</td>
<td>7.590</td>
<td>.724</td>
</tr>
</tbody>
</table>

The results of the independent t-test (t (109) = 5.38, P < .05, R = .45 it represented an almost large effect size) (Table 2) indicate that there was a significant difference between the EFL learners’ productive and receptive knowledge on lexical English collocations. Thus the first null-hypothesis was rejected.

#### 4.2. Research Question 2

Is there a significant relationship between foreign language vocabulary knowledge, and foreign language lexical collocational knowledge?

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Deviation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Std. Error Mean</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>95% Confidence Interval</td>
<td>Lower</td>
<td>Upper</td>
<td></td>
</tr>
<tr>
<td>Difference</td>
<td>3.864</td>
<td>5.389</td>
<td>.000</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>Lower</th>
<th>Upper</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.864</td>
<td>7.519</td>
<td>.717</td>
<td>2.443</td>
<td>5.285</td>
<td>5.389</td>
</tr>
</tbody>
</table>
A Pearson correlation was run to probe any significant relationship between foreign language vocabulary knowledge, and foreign language lexical collocational knowledge. The results \((R (110) = .67, P < .05, \text{it represented a large effect size})\) indicate a significant relationship between the two variables. Thus the second null-hypothesis was rejected.

**Table 3. Pearson Correlation; Foreign Language Vocabulary Knowledge, and Foreign Language Lexical Collocational Knowledge**

<table>
<thead>
<tr>
<th>Vocabulary Knowledge</th>
<th>Pearson Correlation</th>
<th>Sig. (2-tailed)</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lexical Collocational Knowledge</td>
<td>.679**</td>
<td>.000</td>
<td>110</td>
</tr>
</tbody>
</table>

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

5. **Discussion**

Considering the first question of the study whether there is a significant relationship between productive and receptive lexical collocational knowledge of Iranian undergraduate EFL learners, the results in table 2 indicated the existence of a positive relationship between these two variables. Nonetheless the performance of the subjects on the productive collocation test lagged behind their performance on the receptive test. The mean of the scores for the productive collocational test was 13.84; whereas the mean for the receptive test was 17.70. The authors attempt to supply the reasons for their findings as far as they can. They also try to highlight the similarities and differences between the present study and the similar studies.

The findings in the first and the second tables are supported by Al-Amor's (2006) study which assessed the productive and receptive collocational knowledge of Saudi EFL learners but there existed one major difference. The results of Al-Amor's study showed that there was a lack of collocational knowledge among the subjects as manifested by their poor performance on the collocational test. Our findings in this respect are in complete agreement with the findings of Al-Amor's. His data also revealed that there was a relationship between the EFL learners' receptive and productive knowledge of collocations. However, his subjects performed better on the productive test \((M=32.88)\) than on the receptive test \((M=24.64)\), a finding that is paradoxical considering the evidence that receptive knowledge is typically broader than productive knowledge. This finding is in contrast with the findings of the present study because the mean of our subjects on the productive test \((M=13.84)\) was smaller than their receptive test \((M=17.70)\) However, Al-Amor attributed this to the fact that the target collocations in his receptive test were of lower frequency than those in the productive test. However, in the present study the frequency in the two tests were almost the same. Nevertheless, almost the same results concerning the poor performance of the learners on the productive test was obtained. Therefore, the results might be attributed to other factors and not just the frequency of collocations on the tests. The authors of the present study attribute the better performance of the subjects on the receptive test to guessing. A factor which has to be considered when the testees are supposed to choose rather than produce in which the testees have to rely on their active knowledge and not on their passive knowledge which is almost always greater than their active performance.

Shehata (2008) examined the L1 influence on the productive and receptive knowledge of collocations by advanced Arabic-speaking English students. The probe of the study consisted of five instruments: a self-report questionnaire, two fill-in-the-blank productive tests, an appropriateness judgment receptive test, and a vocabulary recognition test. The findings yield significant differences between ESL and EFL participants on both productive
and receptive collocational knowledge. According to Shehata, this indicates that the ESL learning context enriches the learner's knowledge of collocations while the EFL context does not. The results of Shehata's (2008) study as observed from the mean of the scores of EFL learners in the productive and receptive tests, the students performed better on the receptive test. Moreover, the EFL group lagged behind ESL group and perhaps the reason why our subjects in the present study performed so poorly might be explained by the EFL environment in which they had to learn English. Overall, Shehata's study corroborates with the previously mentioned studies that Arabic-speaking EFL learners have poor knowledge of collocations. This can be attributed to the influence of the learning environment. This conclusion is consistent with the present study since due to cultural, religious and environmental similarities, The Iranian EFL learners in our study displayed the almost the same results as the Arab EFL learners in Shehata's research. The results in Shehata's study also showed that L1 interference had a strong effect on the participants' collocational performance.

The second question of the present study attempted to discover whether there was a significant relationship between foreign language vocabulary knowledge and foreign language lexical collocational competence of the Iranian undergraduate EFL learners.

As the results of the present study revealed the mean of the students' scores on the receptive vocabulary was 94.81 while the results for the productive vocabulary test showed the mean of 48.96. A figure which was quite disappointing. Nevertheless, the results indicated that there existed a positive correlation between the receptive and productive vocabulary knowledge of the learners but as with the receptive and productive collocational knowledge, the learners' performance on the productive aspect lagged far behind their performance on the receptive aspect. Table 3 reported the existence of a positive relationship the students' vocabulary knowledge and their knowledge of collocations. It must also be noted that in general the students performed better on the vocabulary test than on the collocation test although as stated earlier the two components were correlated and those students who had good scores on the collocation test also performed well on the vocabulary test but their general performance on the vocabulary test was better than the collocational test.

It must be noted that a host of factors contribute to the somehow controversial results obtained from the studies which attempt to address the issue of vocabulary development and collocational knowledge. Parts of the difficulties arise from the nature of the variables which according to some scholars are very difficult separate (Schmitt et al. 2001). And parts of the problems originate from both the qualitative aspects of the studies and the methods employed to elicit data.

Schmitt et al. (2001) claimed that it is very difficult to distinguish between L2 learners' receptive and productive vocabulary knowledge through empirical research due to various definitions of receptive and productive knowledge and the diversity of measurement methods. Therefore, similar to any studies of this nature, the results obtained from the present study should be taken with care for the sake of generalization of the true receptive and productive vocabulary knowledge of the Iranian EFL learners.

As the results of the present study indicate there is a significant relationship between collocational knowledge and L2 vocabulary these results are consistent with the notions of Laufer (1988)who maintains that the obvious 'rulelessness' of collocations might make them act as one issue which obstructs vocabulary learning in the development of L2 vocabulary. She asserts that collocations mark a remarkable aspect of L2 learners' vocabulary. In the present study those students who were proficient in collocations scored higher in both receptive and productive vocabulary tests. The Iranian students performed better on the receptive test a fact might be partly explained by the guessing strategy. Laufer (1988) believes that collocations can be very helpful in many levels of vocabulary development and acquisition. Collocations can also boost self-learning strategies like guessing. Likewise; boosting vocabulary knowledge can enhance the possibility of increasing collocational knowledge. Therefore it is not surprising that those students who possessed a better mastery of collocations acted better on the receptive vocabulary test for which the possibility of guessing should be taken into account since in receptive tests the testees' production ability is tapped and therefore the test takers may count on their guessing ability which Laufer believes can be boosted through collocations.

To underscore the importance of collocation in the development of vocabulary acquisitions the ideas of Smith may be quite revealing. Smith (1983) claims that teaching collocations can facilitate the acquisition of vocabulary for EFL students who are mostly University-bound. The shortcomings of the Iranian university
students on the vocabulary tests in the present study might also be explained by what Aghbar (1990) believes to constitute one of the main reasons which is collocations and language chunks. Aghbar (1990) sees the performance of EFL students on most vocabulary test not due to a lack of vocabulary knowledge, but rather a result of insufficient attention to mastering language chunks. A feat which can be partly overcome through the proper inclusion of collocation teaching in the university textbook of the EFL/EFL learners. He maintains that collocations should be an essential part of EFL/ESL curriculum, because collocations can be helpful for the acquisition of L2 vocabulary performance in general. Channel (1981) revealed the poor performance of EL learners on collocation tests emphasized the importance of collocations in the development EFL vocabulary. In her paper, Channel (1981) claims that a good collocational grid can act as an aid in developing and strengthening the vocabulary knowledge of EFL/ESL learners.

As stated earlier the present study revealed the existence of a positive correlation between collocational knowledge and both indexes of vocabulary that is receptive and productive knowledge. However, a host of studies have shown that collocational knowledge and vocabulary development do not proceed neck by neck with their vocabulary knowledge due to the fact that "collocations have been largely neglected in EFL/ESL instruction and that learners are therefore not aware of collocations as a potential in language learning." (Bahns & Eldaw 1993: 108). To examine collocational knowledge of 58 German EFL learners, Bahns & Eldaw (1993) employed a cloze test and translation test 34 EFL German students finished a German-English translation test and 24 students completed a cloze test. The findings of these two authors regarding the role of collocations in the development of EFL vocabulary revealed that the development and expansion of students' knowledge of collocations did not have the same pace as their general vocabulary knowledge. Bahns & Eldaw cite "our analysis of translation reveals that, whereas verbal collocations made up 23.1% of all the lexical words which could occur in the sentence, they made up 84.2% of all errors" (Bahns & Eldaw 1993: 108). Since Bahns & Eldaw employed a translation task to elicit both vocabulary and collocational knowledge their finding must be considered with care to be compared with present study. At the same time, they treated neither the components of lexical collocational knowledge nor those of the vocabulary competence. However, their study similar to the present study also revealed the existence of a sort of correlation but perhaps due to the diversity of their eliciting procedures their results turned out to be different. A fact which is not surprising given what Schmitt et al (2001) claimed regarding the diversity of measurement methods in this respect.

Another study which attempted to probe the relationship between collocations and general proficiency in English was conducted in Iran. Shokouhi & Mirsalari (2010) studied correlation between the collocational knowledge and general linguistic knowledge of EFL learners. Based on data, there is overall a moderate correlation between proficiency and grammatical collocation and a significant correlation between proficiency and lexical collocation. The results also showed a moderate correlation between the proficiency test as an index of general English knowledge and collocation knowledge (Shokouhi & Mirsalari, 2010: 8).

Studies like (Shokouhi & Mirsalari, 2010) instead of being revealing will increase the confusion in the already indeterminate realm of collocations, vocabulary and language proficiency. Since it is not yet certain whether collocations are parts of vocabulary or they should be treated as separate indexes of general language proficiency. Even treated as parts of general proficiency in English will not make the point easier and their separation into lexical and grammatical does not improve the matters. In general, we can conclude that the results of (Shokouhi & Mirsalari, 2010) provided that vocabulary be treated as one major index of general proficiency and its role be emphasized, can be consistent with the present study.

6. Conclusion & Implication

The present study tested the following two hypotheses: first, there is no significance between productive and receptive lexical collocational knowledge of Iranian undergraduate EFL learners. Second, there is no significant relation between English language vocabulary development and English language lexical collocational knowledge. The result of the independent t-test (t (109) = 5.38, P<.05, R=.45 it represented almost large effect size) indicate that there was a significant difference between the EFL learners' productive and receptive knowledge on lexical English collocations. Thus the first null-hypothesis was rejected. The results for the second question (R (110) =
.67, P<.05, it represented a large effect size) indicate a significant relationship between the two variables, thus the second hypothesis was rejected.

Considering lexical collocations, the authors of the present study can claim that this study has taken into account the following implications and these implications can be observed in their study. The findings of the present study have implications for teachers and L2 learners. Teachers can realize the problems which students have in the development of their language proficiency which may be due to lack of lexical collocational knowledge in ESL/EFL learning.

In spite of the current supposition that English learners at universities are advanced learners, the studies and tests given to those learners prove the opposite. Therefore, attention should be paid to teaching collocations and vocabulary directly to these learners and since L2 learners' lexical collocational knowledge is positively related to their language production, college English teaching should take into account both teaching individual words and grammatical patterns. Therefore, teaching collocational chunks has the greatest priority.

The present study revealed the existence of a wide gap between the non-linguistic students' receptive and productive vocabulary size. College English instruction used to employ grammar and translation; however, the new college English curriculum emphasizes communicative skills and the capability of exchanging information effectively through both written and spoken made. Therefore, the pedagogical approach to language teaching is shifting towards communicative language teaching. However, through communicative approach, although the learners may become able to recognize a large number of words, they want be able to use them productively. In Iran, most colleges teach vocabulary through extensive readings both in and outside classrooms. Therefore, a learner is said to know a word when he or she knows its meaning on a reading text.

To overcome the problem of gap between receptive and productive vocabulary knowledge, learning vocabulary through communicative activities must be combined with explicit vocabulary learning. One strategy for acquisition is learning words from a list. Recent studies show that list learning of English vocabulary can be very efficient. Thornbury (2007) believes that the value of list learning has been underestimated and proposes a number of techniques for effective use of word lists in the classroom. For instance, consider Academic Word List (AWL) by Coxhead (2000) to boost academic vocabulary knowledge. AWL is divided into 10 sublists of word groups; therefore, teachers may ask their students to work on each sublist for every few weeks. Through learning various aspects of words, like (meaning, form and collocations), the students gradually will be able to use them both receptively and productively. Some vocabulary enhancement activities such as retelling stories, problem solving and transfer of information activities may also be added by teachers. Moreover, the students should become fully aware of the significance of academic vocabulary and design related activities for the practice of learning academic activities.

References


