Investigating the Relationship Between Iranian EFL Learners’ Use of Strategies in Collocating Words and Their Proficiency Level

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Abstract

This study investigated the relationship between Iranian EFL learners’ use of strategies in producing English collocations and their proficiency level. Participants were 115 undergraduate university students at 3 proficiency levels, that is, low, intermediate, and high, majoring in English language at the Faculty of Letters and Humanities at Shahid Chamran University of Ahvaz, Iran. Their selection was based on their scores on a proficiency test (Oxford Quick Placement Test, OQPT). Participants’ knowledge of collocations and the strategies used were examined through a fill-in-the-blank and a translation test, both of which were accompanied by a self-report questionnaire. Findings showed that all the strategies in the self-report questionnaire were employed by the participants. However, retrieval, literal translation, and L2 common and delexicalized words were the most commonly employed strategies. Quantitative analysis of the data also revealed that the participants’ overall use of strategies in producing correct collocations was lower than their use of strategies in producing incorrect collocations. Results also showed that the participants in the 3 proficiency groups appeared to have adopted the same strategies and did not differ much in their total use of strategies. Nevertheless, there were differences among the 3 groups in producing correct collocations. These findings have immediate implications for EFL learners, teachers, and materials designers.

Keywords: English Collocations; Strategies; EFL Learners; Iranian English Learners

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1. Introduction

The term *collocation*, etymologically speaking, is derived from the Latin word *collocare* (*call “together” + locare “to place”), which implies putting or placing together. Firth (1957) was the scholar who made the term collocation widely known linguistically, and so he is responsible for bringing the concept of collocation into usage in linguistic studies. Firth (1957) essentially perceived collocation as a means to get to a word’s meaning. It was this view that made him majestically proclaim, “you shall know a word by the company it keeps” (p. 179), thus giving collocation a central position in the theories of word meaning. He claimed that part of the meaning of a word could be established by collocation, and he considered collocation as an abstraction at the syntagmatic level, “not directly concerned with the conceptual or idea approach to the meaning of words” (p. 196).

Since its birth, collocation has been labeled in a variety of ways, for example, multiword units, prefabs, and so on, and it has been defined differently in both linguistics and language teaching. The only consensus, as Nesselhauf (2005) argued, is that collocation refers to “some kind of syntagmatic relation of words” (p. 11).

No matter how collocations are defined or labeled by linguists and language teachers, they are generally regarded as a problematic area in the teaching and learning of second and foreign languages, and as numerous studies bring evidence to support this view, producing English collocations creates severe problems for learners of English (Howarth, 1998; Mahmoud, 2005; Nesselhauf, 2003). Learners may use some strategies to fill a lexical gap as they try to produce certain collocational strings in the L2. Problems that learners face could be partly attributed to special strategies that they employ when producing English collocations. By examining the strategies that learners employ while trying to deal with L2 collocations, the current study was an attempt to provide insights into the underlying processes that students apply to make up for the insufficiency in their L2 linguistic system. A thorough understanding of such underlying mental processes can assist teachers to revise their teaching methods and materials in the area of collocations more efficiently.

2. Literature Review

2.1 Strategies Employed in Producing L2 Collocations

Due to insufficient knowledge of collocations, English language learners frequently adopt certain strategies to produce collocations and thus create certain types of errors (Liu, 2013). The most commonly reported strategy used by language learners is *transfer* in which learners rely on their L1 equivalents when they fail to find the desired lexical items in the L2. For instance, Biskup (1992), in examining
Polish and German EFL learners’ performance in English collocation use, showed that the learners, based on risk-taking, did transfer their L1 knowledge of collocations to their production of collocations in L2 which resulted in incorrect use of English collocations. He argued that whereas the native-like collocation in English is to set a record, the Polish learners had a tendency to use to state a record, which is suggestive of an L1 collocational pattern. Similarly, the German learners were found to produce the L1-based deviation to lend a bookshop instead of the English native-like version to run a bookshop. The transfer strategy may reflect the learners’ assumption that there was a one-to-one correspondence between their L1 and L2.

Aside from relying on their L1, EFL learners may use synonyms or paraphrasing. This is frequently used by learners whose proficiency in an L2 is limited. They may substitute the target item with a synonymous alternative and use paraphrasing to express the target collocations with which they are not familiar. For instance, in a study by Farghal and Obiedat (1995), it was shown that the Arabic EFL learners highly relied on the open-choice principle for word selection, replacing a word with its synonym. Adopting such a strategy often led them to deviant, ungrammatical collocations in English. In a similar vein, Liu (2013) showed that the L2 learners seemed to draw an analogy between collocates of two synonyms, thus often resulting in errors in the L2. For instance, they produced “the unusual combination *adopt ways, which was presumably caused by analogy with the correct collocation adopt an approach” (p. 12).

Another frequently used strategy reported by researchers (e.g., Howarth, 1998; Phoocharoensil, 2011) is avoidance. It is a common observation of researchers that testees often avoid carrying out certain tasks because they are perceived as difficult or time-consuming or when they fail to retrieve the appropriate items of which they have passive knowledge. As a consequence, they alter the intended meaning of the collocations (Howarth, 1998; Phoocharoensil, 2011).

Several other types of strategies (e.g., retrieval, approximate translation, use of delexicalized words, appeal to authority, appeal for assistance, circumlocution, approximation, word coinage) have been reported which are frequently employed by language learners in their attempts to collocate L2 words (Liu, 2013).

2.2 Present Study

Although several researchers have investigated the knowledge of English collocations of EFL learners who come from various cultural backgrounds in different countries (Zarei, 2002), very few studies have examined the Iranian EFL learners’ knowledge of collocations. Furthermore, among the small number of the
studies reported, almost no study, to the best of our knowledge, has reported on the use of strategies by the Iranian EFL learners. Thus, the current study, in an attempt to fill this gap, investigated the Iranian EFL learners’ ability to use English collocations. An attempt was made to identify the strategies that they usually adopt when they are not familiar with acceptable collocations in English. More precisely, this study was an attempt to provide answers for the following research questions:

1. What kinds of strategies do EFL learners use to produce collocations?

2. Do learners at various proficiency levels differ in their use of strategies to produce collocations?

3. Methodology

3.1 Participants

The participants were 115 undergraduate university students (freshmen, sophomores, juniors, and seniors) at three proficiency levels, that is, low, intermediate, and high majoring in the English language at the Faculty of Letters and Foreign Languages at Shahid Chamran University of Ahvaz, Iran. Their selection was based on their scores on Oxford Quick Placement Test (OQPT, 2001). Based on their scores on such a test, they were assigned to three proficiency level groups: low (n = 22), intermediate (n = 56), and high (n = 37). Participation was voluntary. There were 39 males and 76 females whose ages ranged from 19 to 26; all were native speakers of Persian.

3.2 Instruments

The data collection instruments utilized included the following:

1. A proficiency test: The OQPT (2001) was used to measure the proficiency level of the participants. OQPT is a flexible test of English language proficiency developed to give teachers a reliable and time-saving method of finding a student’s level of language proficiency. Geranpayeh (2006) argued that OQPT, which is a standardized English proficiency test, has been pretested and validated by about 6,000 students in about 60 countries. According to Allan (2004), the developer of the test, OQPT has been calibrated against the proficiency levels based on the Common European Framework of Reference for Languages (CEF), the Cambridge ESOL Examinations, and other major international examinations such as TOEFL. The cut-off points for proficiency levels set by Allan (2004) was considered by several researchers (e.g., Jabbari, 2014; Rebarber et al., 2007; Tahriri & Yamini, 2010) as reliable indicators that would signal language proficiency levels. Based on Rebarber et al.’s (2007) observation, such criteria are inclusive and usable for determining the proficiency level of EFL learners with different cultural backgrounds in different countries. In a similar vein, Allan (2004) argued that OQPT
has the characteristics of a good international test and the scoring criteria set for such a test are convenient for all levels in different educational institutions throughout the world. The scoring criteria for proficiency levels according to Allan (2004) are as follows:

Table 1. *Scoring Criteria for Proficiency Levels*

<table>
<thead>
<tr>
<th>Proficiency Levels</th>
<th>Cut-Off Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beginner</td>
<td>0-29</td>
</tr>
<tr>
<td>Breakthrough</td>
<td>30-39</td>
</tr>
<tr>
<td>Elementary</td>
<td>40-49</td>
</tr>
<tr>
<td>Lower-Intermediate</td>
<td>50-59</td>
</tr>
<tr>
<td>Upper-Intermediate</td>
<td>60-69</td>
</tr>
<tr>
<td>Advanced</td>
<td>70-79</td>
</tr>
<tr>
<td>Very Advanced</td>
<td>80-100</td>
</tr>
</tbody>
</table>

2. A fill-in-the-blank test of English collocations: In the absence of any valid and reliable measure already available for such a purpose, a fill-in-the-blank test was designed by consulting the following resource: *Oxford Collocations Dictionary for Students of English* (2002). It consisted of a 50-item adjective + noun and verb + noun collocation in a fill-in-the-blank format which was an attempt to elicit the learners’ production of a set of particular English collocations. In addition, it elicited their use of strategies. In this test, each item was composed of an English sentence with a blank + a noun collocation. The participants were required to fill in each blank with the most appropriate adjective or verb that could produce an acceptable collocation with the **bold** noun in the sentence. In order to help the participants to produce the intended collocations, a definition of the whole collocation in English was provided as a prompt. A sample of items of the test is presented in Appendix A. The rationale behind choosing these types of collocations, namely, adjective + noun and verb + noun collocations to be the focus of the current study was two-fold. First, these two types of collocations are considered as the most common types of collocations in English (Lewis, 2000; Newman, 1988). Second, it has been reported that these types of collocations create more problems for L2 learners in comparison to other types of lexical collocations (Nesselhauf, 2003; Schmitt, 2000).

3. A translation test: The third test was a translation test developed by the researchers. The items for the translation were selected from *Common Idioms and Collocations in English and Persian* compiled by Radmanesh (2000). Ten items were also borrowed from Nowruzi Khiabani (2000) and Sadeghi (2009). The purpose of this test was first to test the participants’ knowledge of collocations and second to elicit their strategies in translating collocations from Persian into English.
According to Tarone’s (1981) taxonomy of strategies, translation is one of subcategories of L1-based strategies which is used by L2 learners as a compensation strategy. Schmitt (1997) employed a translation test in his investigation of strategy use by the learners in coping with L2 collocations. Therefore, as the current study was mainly based on Schmitt’s (1997) taxonomy of strategies, it was decided to use translation as one way of searching for strategy use. In this type of test, there were 30 sentences with blanks for the intended collocations, 15 sentences with blanks for adjective + noun collocations, and 15 sentences with blanks for verb + noun collocations. The Persian equivalents of the collocations in question were provided at the end of each test item, and the learners were asked to supply the missing words taking into consideration the Persian equivalents. A sample of items of this test is given in Appendix B.

4. A self-report questionnaire: A self-report questionnaire is a list of several characteristics or activities presented to the participants. Individuals are asked to study the list and then to produce a mark opposite the characteristics they possess or the activities in which they have engaged for a particular length of time. Self-report questionnaires are often used when researchers want students to diagnose or to appraise their own performance (Fraenkel & Wallen, 2006). To elicit the required data, a self-report questionnaire with nine options of strategies that were expected to be employed by the participants and, according to Ellis (2004), are mainly meant to deal with lexical problems was used. The questionnaire was designed by the researchers based on the strategies adapted from Dörnyei’s (1995) and Schmitt’s (1997) taxonomies of strategies. The reliability of the questionnaire was .87, estimated by Cronbach’s alpha. The questionnaire was validated by a jury of specialists (see Appendix C).

3.3 Pilot Study

In the present study, different steps were taken to collect information about the usefulness of the tests and for the improvement of testing procedures. The first step was item analysis. After a set of items for the tests were written, reviewed by experts, and revised on the basis of their suggestions, the collocation tests were ready for experimentation tryout on a sample group of 40 EFL learners. To this end, the tests were administered to a selected group of candidates. A thorough item analysis was conducted in order to obtain the index of item difficulty and item discrimination. The scores collected from this administration were analyzed using Brown’s (2004) cut-off score.

The next step in the process of standardization was to establish the desired reliability. To establish the desired reliability of collocation tests, Kuder-Richardson formula (KR-21) was used. This is generally assumed as the best technique to find
The third step to test standardization through the pilot study was to establish the validity of the tests. To this end, concurrent validity was carried out. It was believed that if the newly developed test was a valid measure of a particular construct, it would significantly correlate with the outside criterion measure of the same language ability (Chen, 2008). To accomplish this objective and to establish concurrent validity, the researchers, first, administered the newly developed collocation tests (NDCTs) to a pilot group of 40 students. Then, within two weeks’ interval, the criterion collocation tests (CCTs), developed by Hawraz (2010), and Zarei and Koosha (2003), were administered to the same group. The results showed that the tests fulfilled the criterion of concurrent validity.

### 3.4 Procedure

First, a proficiency test was administered to determine the participants’ levels of proficiency. Following the scoring criteria developed by Allan (2004), those participants who had scored 49 and below were assigned to the low level, and those whose scores had been within the range of 50-69 were classified as the intermediate level, and finally those who had scored 70 and above were considered as high-proficiency level.

Second, after explaining the purpose of the study and giving detailed instructions concerning the strategies included in the self-report questionnaire, a 50-item adjective + noun and verb + noun collocation in a fill-in-the-blank format accompanied by a self-report questionnaire was administered. It took them about 40 min to complete.

Third, the translation test including 15 sentences with blanks for adjective + noun collocations and 15 sentences with blanks for verb + noun collocations along with a self-report questionnaire was administered. The participants completed this part in 35 min.

### 3.5 Data Analysis

All the collocations used by the participants were rated for their acceptability. For the accuracy of judgment, a collocation book and several dictionaries of collocations (mentioned above) were consulted. In assessing the accuracy of collocations used, there were several significant factors that had to be taken into consideration. The combinations of adjective + noun and verb + noun were judged to be accurate and acceptable if they occurred in the participants’ production the same as those combinations that existed in the sources of the acceptability’s judgment. A combination was considered identical if it appeared in
the same form; adjective + noun and verb + noun and in the same sense (i.e., the intended meaning of the sentence given in the production tasks) as that which occurred in sources of validity in the acceptability’s criteria cited above. Deviation in tense aspect and spelling mistakes were overlooked because the acceptability criteria in this study centered on lexical, syntagmatic, and semantic features of the generated combinations. For instance, in the case of tense aspect, if the participant used the collocation did a favor as opposed to what the sentence required do a favor, the collocation was considered accurate on the lexical and semantic level. Here, the participant’s deviation was grammatical rather than lexical or semantic deviation. After categorizing responses to correct or incorrect collocations for each item generated by participants, they were rated as follows: The correct collocations were marked (1), whereas the incorrect collocations were marked (0).

After scoring the learners’ answers in the fill-in-the-blank and translation tests, whether they produced correct or incorrect collocations, a qualitative analysis of the data was carried out to identify strategies used by each participant for each item. The researchers looked at the following data sources in both tests to determine what strategy the participant had used in each item whether the lexical item or combination of lexical items formed correct or incorrect collocations:

- Participants’ answers in the blanks
- Participants’ choice of strategies from the self-report questionnaire
- Participants’ translation of the collocations in each sentence

Finally, quantitative analysis was performed to determine the frequency and percentage of each strategy used in the data and to see whether the participants had produced correct or incorrect collocations.

4. Results and Discussion

4.1 Participants’ Performance on Collocation

In order to analyze the data quantitatively, the number of the correct collocations and the number of the incorrect collocations for each item answered by the participants were counted. As the data in Table 2 indicates, out of 7,546 items answered by the participants, only 3,139 (41.60%) responses led to the production of correct collocations and 4,407 (58.40%) resulted in the production of incorrect collocations:
Investigation the Relationship Between Iranian . . .  

Table 2. Participants’ Overall Production of Correct and Incorrect Collocations

<table>
<thead>
<tr>
<th>Learners’ Proficiency Level</th>
<th>N</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
<th>No.</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>22</td>
<td>415</td>
<td>5.50</td>
<td>1,084</td>
<td>14.37</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intermediate</td>
<td>56</td>
<td>1,523</td>
<td>20.18</td>
<td>2,038</td>
<td>27.01</td>
<td>7,546</td>
<td>100</td>
</tr>
<tr>
<td>High</td>
<td>37</td>
<td>1,201</td>
<td>15.92</td>
<td>1,285</td>
<td>17.03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>3,139</td>
<td>41.60</td>
<td>4,407</td>
<td>58.40</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To get a clearer picture of each group’s performance (i.e., high-, intermediate-, and low-proficiency learners), Tables 3, 4, and 5 show the results obtained from the two tests. As shown in the tables, out of a total of 7,546 responses, 2,486 belonged to the high-proficiency group, 3,561 to the intermediate group, and 1,499 to the low-proficiency group. Also, the data show that out of these 7,546 responses, only 3,139 resulted in the production of correct collocations, which is indicative of the fact that the EFL learners encountered problems in the production of correct collocations. Nevertheless, as indicated in Table 3, the high-proficiency group produced more correct collocations in comparison to the intermediate- and low-proficiency groups:

Table 3. High-Proficiency Group’s Production of Correct and Incorrect Collocations (n = 37)

<table>
<thead>
<tr>
<th>Tasks</th>
<th>High-Proficiency Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Collocations</td>
</tr>
<tr>
<td></td>
<td>No.</td>
</tr>
<tr>
<td>Fill-in-the-Blanks Adjective + Noun</td>
<td>361</td>
</tr>
<tr>
<td>Fill-in-the-Blanks Verb + Noun</td>
<td>384</td>
</tr>
<tr>
<td>Translation Adjective + Noun</td>
<td>216</td>
</tr>
<tr>
<td>Translation Verb + Noun</td>
<td>240</td>
</tr>
<tr>
<td>Total</td>
<td>1,201</td>
</tr>
<tr>
<td>Grand Total</td>
<td>2,486</td>
</tr>
</tbody>
</table>
Table 4. Intermediate-Proiciency Group’s Production of Correct and Incorrect Collocations \((n = 56)\)

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Intermediate-Proiciency Group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Collocations</td>
<td>Incorrect collocations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Fill-in-the-Blanks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjective + Noun</td>
<td>399</td>
<td>26.20</td>
<td>499</td>
</tr>
<tr>
<td>Fill-in-the-Blanks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb + Noun</td>
<td>414</td>
<td>27.18</td>
<td>459</td>
</tr>
<tr>
<td>Translation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjective + Noun</td>
<td>365</td>
<td>23.97</td>
<td>536</td>
</tr>
<tr>
<td>Translation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb + Noun</td>
<td>345</td>
<td>22.65</td>
<td>544</td>
</tr>
<tr>
<td>Total</td>
<td>1,523</td>
<td>100</td>
<td>2,038</td>
</tr>
<tr>
<td>Grand Total</td>
<td>3,561</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5. Low-Proiciency Group’s Production of Correct and Incorrect Collocations \((n = 22)\)

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Low-Proiciency Group</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Collocations</td>
<td>Incorrect Collocations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No.</td>
<td>%</td>
<td>No.</td>
</tr>
<tr>
<td>Fill-in-the-Blanks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjective + Noun</td>
<td>116</td>
<td>27.95</td>
<td>257</td>
</tr>
<tr>
<td>Fill-in-the-Blanks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb + Noun</td>
<td>127</td>
<td>30.60</td>
<td>376</td>
</tr>
<tr>
<td>Translation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adjective + Noun</td>
<td>93</td>
<td>22.41</td>
<td>250</td>
</tr>
<tr>
<td>Translation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verb + Noun</td>
<td>79</td>
<td>19.04</td>
<td>199</td>
</tr>
<tr>
<td>Total</td>
<td>415</td>
<td>100</td>
<td>1,083</td>
</tr>
<tr>
<td>Grand Total</td>
<td>1,499</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Looking at Tables 3, 4, and 5, one can observe that the three groups had more problems in producing English collocations in the translation test than in the fill-in-the-blank test. A possible justification of this result is that in the fill-in-the-
blank test, the participants were asked to provide only a single lexical item whether an adjective or a verb, which could form collocation with the already existing noun in the given sentence, whereas, in the translation test, they were asked to produce the whole adjective + noun and verb + noun collocations. Thus, whereas they were asked to provide only 50% of the collocation in the fill-in-the-blank test, they were required to provide 100% of the collocation in the translation test. That is possible reason why they performed better in the fill-in-the-blank test than in a more demanding task like the translation test.

4.2 Frequency and Percentage of Participants’ Use of Avoidance Strategy

Because the participants were encouraged to answer each item without leaving any blanks, it was expected that total frequency of occurrences of strategies employed by them would be 9,200 or more; however, the analysis of the data revealed that 1,075 items were left blank and 579 items were given careless and irrelevant responses. As the data in Table 6 reveals, out of the total number of 1,075 times of avoidance, 276 (25.67%) belonged to the high-proficiency group, 501 (46.60%) to the intermediate-proficiency group, and 298 (27.72%) to the low-proficiency group.

It is a common observation made by researchers that testees often avoid carrying out certain tasks when they are perceived as difficult or time-consuming. In our data, it is not clear whether the participants’ avoidance was due to their interlanguage level or lack of determination and concentration. On the other hand, in some other cases, the participants employed two or three strategies for answering each item. Each occurrence was considered a separate entry. The frequency and percentage of occurrences for each unanswered item were calculated for each group and are presented in Table 6:

Table 6. Frequency and Percentage of Participants’ Use of Avoidance Strategy

<table>
<thead>
<tr>
<th>Participants’ Level of Proficiency</th>
<th>Participants’ Use of Avoidance Strategy</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>298</td>
<td>27.73</td>
</tr>
<tr>
<td>Intermediate</td>
<td>501</td>
<td>46.60</td>
</tr>
<tr>
<td>High</td>
<td>276</td>
<td>25.67</td>
</tr>
<tr>
<td>Total</td>
<td>1075</td>
<td>100%</td>
</tr>
</tbody>
</table>

4.3 Frequency and Percentage of Strategies Employed in Producing Correct and Incorrect Collocations

In order to determine the participants’ overall use of strategies in the production of correct and incorrect collocations, the frequency and percentage of
occurrences for each employed strategy were calculated. Table 7 shows the participants’ overall use of strategies in producing correct and incorrect collocations:

Table 7. Frequency and Percentage of Strategies Employed in Producing Correct and Incorrect Collocations

<table>
<thead>
<tr>
<th>Strategies</th>
<th>Correct Collocations</th>
<th>Incorrect Collocations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Retrieval</td>
<td>1,232</td>
<td>39.24</td>
</tr>
<tr>
<td>Literal Translation</td>
<td>591</td>
<td>18.84</td>
</tr>
<tr>
<td>L2 Common and Delexicalized Words</td>
<td>563</td>
<td>17.94</td>
</tr>
<tr>
<td>Assumed Synonymity</td>
<td>275</td>
<td>8.76</td>
</tr>
<tr>
<td>Use of Contextual Information</td>
<td>166</td>
<td>5.29</td>
</tr>
<tr>
<td>Circumlocution and Paraphrase</td>
<td>154</td>
<td>4.90</td>
</tr>
<tr>
<td>Use of Descriptions and Definitions</td>
<td>111</td>
<td>3.54</td>
</tr>
<tr>
<td>Overextension of L2 Lexical Items</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Guessing</td>
<td>47</td>
<td>1.50</td>
</tr>
<tr>
<td>Subtotal</td>
<td>3,139</td>
<td>100</td>
</tr>
<tr>
<td>Total Frequency/Percentage</td>
<td>7,546 / 100 %</td>
<td></td>
</tr>
</tbody>
</table>

As seen in Table 7, the total occurrences of strategies employed by participants to produce collocations was 7,546 out of which 3,139 occurrences (41.60%) led to the production of correct collocations and 4,407 (58.40%) to the production of incorrect collocations. Also, as the data in Table 6 clearly shows, retrieval was the most widely used strategy in the production of correct collocations. This strategy was employed 1,232 times (39.24%), suggesting its popularity, followed by literal translation, which was used 591 times (18.84%). Overextension of L2 lexical items was not used at all in the production of correct collocations.

4.4 Frequency and Percentage of Strategies Employed by Participants With Regard to Their Level of Proficiency

The data demonstrated variations in the performance of the participants. The strategies differed in their frequency of occurrence by the same group. They also varied with reference to the difference among the three groups. To give an overview of data, out of the 7,546 employed strategies, the high-proficiency level group used a total of 2,486 strategies, the intermediate-proficiency group used 3,561, and the low-proficiency group employed a total of 1,499 strategies in producing English collocations.

As the data demonstrated, there were variations in the use of strategies in the production of correct and incorrect collocations. These variations are seen within
and between groups. In other words, it can be said some of the strategies were employed by each group with relatively high frequency and some were not used at all or used with low frequency (see Table 8). Out of a total of 2,486 uses of strategies by the high-proficiency group, 1,201 (48.31%) uses resulted into the production of correct collocations, and 1,285 occurrences (51.69%) led to the production of incorrect collocations. On the other hand, the intermediate-proficiency group used strategies 3,561 times, of which 1,523 occurrences (42.77%) resulted in correct collocations and 2,038 occurrences (57.23%) produced incorrect collocations. As with the low-proficiency group, they employed strategies 1,499 times, of which 415 times (27.69%) of occurrence led to the production of correct collocations and 1,084 (72.31%) occurrences resulted into the production of incorrect collocations (see Table 8):

<table>
<thead>
<tr>
<th>Strategies</th>
<th>High-Proficiency Group (n = 37)</th>
<th>Intermediate-Proficiency Group (n = 56)</th>
<th>Low-Proficiency Group (n = 22)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Correct Collocations</td>
<td>Incorrect Collocations</td>
<td>Correct Collocations</td>
</tr>
<tr>
<td>Retrieval</td>
<td>556</td>
<td>22.36%</td>
<td>0</td>
</tr>
<tr>
<td>Litera Translation</td>
<td>229</td>
<td>9.21%</td>
<td>154</td>
</tr>
<tr>
<td>L2 Common and Delexicalized words</td>
<td>176</td>
<td>7.08%</td>
<td>328</td>
</tr>
<tr>
<td>Assumed Synonymy</td>
<td>102</td>
<td>4.1%</td>
<td>161</td>
</tr>
<tr>
<td>Use of Contextual Information</td>
<td>80</td>
<td>3.22%</td>
<td>200</td>
</tr>
<tr>
<td>Use of Descriptions and Definitions</td>
<td>24</td>
<td>0.97%</td>
<td>154</td>
</tr>
<tr>
<td>Circumlocution &amp; Paraphrase</td>
<td>22</td>
<td>0.88%</td>
<td>86</td>
</tr>
<tr>
<td>Overextension of L2 Lexical Items</td>
<td>0</td>
<td>0%</td>
<td>98</td>
</tr>
<tr>
<td>Guessing</td>
<td>12</td>
<td>0.48%</td>
<td>104</td>
</tr>
<tr>
<td>Subtotal</td>
<td>1201</td>
<td>48.31%</td>
<td>1285</td>
</tr>
<tr>
<td>Total Frequency &amp; Percentage</td>
<td>2,486 (32.94%)</td>
<td>3,561 (47.19%)</td>
<td>1,499 (19.87%)</td>
</tr>
</tbody>
</table>
4.5 Frequency of Strategies Used by High-Proficiency Group in Producing Collocations

As shown in Table 8, the high-proficiency group employed all the strategies in the inventory in order to produce collocations. In producing correct collocations, retrieval with 556 times (22.36%) of occurrence ranked first, followed by literal translation, with 229 occurrences (9.21%). This suggests that retrieval was the most widely used strategy by the high-proficiency group in the production of correct collocations. Guessing with 12 (0.48%) occurrences and circumlocution and paraphrase with 22 (0.88%) times of occurrence were the least used strategies by the high-proficiency group in the production of correct collocations.

4.6 Frequency of Strategies Used by Intermediate-Proficiency Group in Producing Collocations

With respect to use of strategies to produce correct collocations, the performances of the intermediate-proficiency group did differ greatly from that of the high-proficiency group. A closer look at Table 8 demonstrates that nine strategies were employed by the intermediate-proficiency group in the production of correct collocations. Of these strategies, retrieval with 502 times of occurrence (14.09%) and L2 common and delexicalized words with 331 occurrences (9.33%) had the highest frequencies, whereas guessing with 17 occurrences (0.48%) and use of descriptions and definitions with 65 (1.82%) occurrences had the least frequencies.

4.7 Frequency of Strategies Used by Low-Proficiency Group in Producing Collocations

As with the use of strategies in the production of collocations, out of a total of 7,546 occurrences of strategies 1,499 occurrences belonged to the low-proficiency group, of which 415 uses led to the production of correct collocations and 1,084 resulted into the production of incorrect collocations. In the production of correct collocations, the most widely used strategy was retrieval with 174 occurrences (11.6%) followed by literal translation with 74 times (4.94%) of occurrence. Other strategies were used with low frequencies.

With regard to the total number of strategies employed by the low, intermediate, and high groups in the production of correct collocations, as Table 8 indicates, the three groups differed in their effective uses of strategies. The results show that the high-proficiency group with 1201 effective uses of strategies (48.31%) were relatively more successful in the use of strategies for productions of correct collocations compared to the intermediate- and low-proficiency groups who employed them 1,523 times (42.77%) and 415 times (27.69%), respectively.
A closer look at the data also reveals that the most successful strategy in the production of correct collocations was retrieval which the high-proficiency group used 556 times (22.36%), the intermediate-proficiency group 502 times (14.09%), and the low-proficiency group 174 times (11.6%), suggesting its common use among the three groups. This also suggests that the low-proficiency group with seemingly a smaller repertoire of L2 vocabulary and consequently not being consciously aware of collocations, failed to find them in their mental lexicon and thus employed retrieval with a low frequency in comparison to the intermediate- and high-proficiency groups who possibly have a larger size of L2 vocabulary. In this regard, Taylor (2002) argued that chances that EFL learners cannot combine words correctly without having previously read and stored them are very high. For this reason, he proposed that, in order to have a good command of English collocations, L2 learners should do a lot of reading of English newspapers, extensive reading of numerous literatures written in English, and modern novels on their own.

Literal translation was the second strategy participants employed when deciding to produce collocations by using their intuition instead of the retrieval strategy. Some participants employed literal translation which proved to be helpful when there was congruency between the two languages. But in cases where the participants generalized the literal translation on noncongruent collocations, L1 interference occurred and resulted in ill-formed collocations. In this respect, Nowruzi Khiabani (2000) pointed out that, in cases where there is a one-to-one correspondence between L1 and L2, L2 learners’ reliance on their L1 not only does not cause any problem for them but does also facilitate their performance in the L2.

The use of L2 common and delexicalized words was the third type of strategy used. One possible reason why some collocations containing delexicalized words were unchallenging whereas others difficult and challenging is that in some collocations of this type the delexicalized component gave its primary sense, whereas in others they gave a meaning which was distanced from its primary sense. For example, in collocations such as do housework, take control of, and keep a secret, the delexicalized components do, take, and keep were used in their primary senses, that is, to do sth, to seize sth, and to hold sth, respectively. In contrast, as expected, in cases where the delexicalized components lost their primary senses and their combinations with the other partners conveyed farfetched meaning, the participants encountered serious problems. For example, in collocations such as make a pact, do vocabulary test, and have a dream, the delexicalized components of collocation, that is, make, do, and have were used in their nonprimary senses.

The fourth type of strategy conducive to the production of collocations was assumed synonymity. Although the analysis of the data showed that the participants employed this strategy with relatively high frequency and their choices occasionally
led to the production of correct collocations, it should not be ignored that a very limited number of synonyms in English can occur in the same collocation pattern (Nation, 2001). For instance, whereas application of synonym was effective in producing collocations such as *deadly weapon, give advice, hold hostage, provide accommodation, gain experience, take control, and keep a secret, it was proved to be ineffective in other cases. For instance, incorrect collocations such as *get cold, *do measure, *empty tape, *good sleep, *quick lane, *decayed egg, and *get a revenge on were produced because the participants, unaware of selectional restrictions, replaced catch with get, take with do, blank with empty, sound with good, fast with quick, rotten with decayed, and take with get.

The fifth type of strategy adopted to a certain extent by the participants in the production of collocations was use of contextual information. Nation (2004) argued that it is the local context and sometimes the context beyond it, that is, sentential context which helps determine the collocates of a certain lexical item.

Circumlocution or paraphrase was the sixth type of strategy used by participants in translating collocations. It seems that when the learners failed to translate certain Persian collocations into English, they resorted to circumlocution and paraphrase to convey the intended meaning and produce the target collocation.

Use of descriptions and definitions provided below each item was the seventh type of strategy which the participants relied on in their attempts to provide answer for certain items in the fill-in-the-blank test. It seems that when the participants were unable to find the right collocation to use, they relied on the descriptions and definitions as an appeal to the authority strategy.

Guessing strategy was the eighth type of strategy which the participants employed in their attempt to produce English collocations. It seems that the participants who did not know the most appropriate lexical items to produce correct collocations, tried to rely on Guessing strategy. According to Oxford (1990), guessing strategies can be made based on a wide range of clues; namely, linguistic and nonlinguistic clues. In a similar vein, Nagy (2009) argued that the effects of guessing are determined by L2 learners’ knowledge of linguistics, strategies, and the world.

The findings showed that all the three groups relied more or less on approximately similar strategies in the process of producing correct or incorrect collocations; however, they differed with regard to the frequency of uses of most of the strategies employed especially in the production of correct collocations. The data also showed that as the learners’ proficiency in English enhanced, their effective uses of strategies improved.
These results are consistent with the findings of a recent research which showed that as the learners’ proficiency level increased, their uses of strategies enhanced (Lia, 2010). This conclusion is also in line with that of Ahmed (1999), who notes, “good learners not only use more strategies, but they are more successful in their uses of strategies than the poor learners use” (p. 9). These findings also corroborate that of Oxford (1990) who reported that use of strategies is more strongly related to proficiency level. It is, however, not in accord with Kaivanpanah, Yamouty, and Karami (2012) who found no relationship between the use of strategies and language proficiency level.

5. Conclusion

The purpose of the current study was to identify strategies which the EFL learners claimed they used during the production of English collocations. The findings showed that almost all the strategies in the self-report questionnaire were employed by the participants in the three proficiency groups. However, retrieval, literal translation, and L2 common and delexicalized words were the most commonly employed strategies. Even though several scholars have attributed most of the learners’ errors in the process of producing English collocations to negative transfer from native language which is the only source from which L2 learners can gain support (Bahns & Eldow, 1993; Farghal & Obiedat, 1995; Nesselhauf, 2003; Zughoul & Abdul-Fattah, 2001), the results of the current study showed that intralingual factors were also responsible for some collocational errors. This was shown in the participants’ use of L2 common and delexicalized words, overextension of L2 lexical, and assumed synonymity. The findings are consistent with the findings reached by Wang and Shaw (2008) who proposed that, in addition to L1 transfer, other factors were responsible of the learners’ collocational problems.

The most important goal to use collocational strategies is to compensate for deficiencies resulting from an inadequate L2 linguistic system to foster communication in L2. Therefore, scholars studying learners’ language production recommended teaching collocations in order to help learners communicate effectively in L2. The findings also showed that all the three groups relied more or less on approximately similar strategies in the process of producing correct or incorrect collocations. This indicates that learners with different proficiency levels have certain ability in common that is referred to as strategic competence. Even though all the three groups did not differ significantly from each other on their overall selections of strategies, they differed with respect to the frequencies of occurrences of most of the strategies employed, especially in the production of correct collocations.
6. Pedagogical Implications and Recommendations

Collocational strategies adopted by the participants in answering questions were investigated with the hope to provide teachers with a useful tool to understand their learners’ performance when attempting to produce English collocations. In particular, we hope the findings here shed light on areas of strength and facilitate identifying the functional strategies for promoting learners’ performance in language. The findings may also help teachers to identify those productive strategies that result in the production of correct collocations. Knowing which strategies are employed during the process of producing L2 collocations brings about illuminating insights for both teachers and learners. It enables teachers to improve their learners’ success in collocating words by fostering the use of those helpful strategies which are overlooked by learners. Learners may also benefit greatly by becoming more aware of the types and frequency of strategies they employ in the production of collocations. As a result of this awareness, L2 learners may have a better understanding of their strengths and weaknesses in strategy use and would then be able to improve their collocational knowledge.

Because retrieval appeared to be helpful in the production of correct collocations, it is recommended that other ways be discovered to improve learners’ ability to retrieve correct English collocations. For this purpose, early exposure to collocations is suggested from the initial stages of L2 learning (Hill, 2000; Lewis, 2000). Collocations should be presented through listening programs and intensive reading at the initial stages of EFL learning to supply an L2 collocational input, which can later result into an output on the part of learners. In this regard, Hill (2000) pointed out that, “what the language learners are exposed to from the initial stages is crucial. Good quality input should lead to good quality retrieval” (p. 54). Consequently, when an L2 vocabulary item is first presented to learners, it should be introduced with its frequent partners in its L2 usual use. Such partnership between lexical units should be emphasized as early as possible. In this way, learners would confidently identify such partnerships whenever they face them; hence, they may learn and later retrieve them as whole chunks.

The findings also showed that in producing both correct and incorrect collocations, the participants overused a particular strategy such as L2 common and delexicalized words with high frequency in comparison to other strategies. According to Hill’s (2000) and Lewis’s (2000) observations, if teachers wish to extend the collocational competence of language learners, they should use the language that learners already have. To this end, they propose that learners are provided with already known common adjectives and verbs together with their frequent noun collocates (Lewis, 2000). For instance, it is recommended to present delexicalized verbs such as do, make, take, get, have, put, and give, or common
adjectives such as good, big, full, complete, great, little, quick, large, strong, and bad with a wide range of their noun collocates. Therefore, learners will be persuaded to look for the collocational ranges of such common adjectives or verbs and subsequently practice them in their usual use. Furthermore, based on Woolard’s (2000) view, learners’ attention should be drawn to the fact that learning more vocabulary is not just learning new words; it is often learning familiar words in new combinations.

Moreover, the findings showed that, in the process of producing both correct and incorrect collocations, the participants relied heavily on their L1 to provide answers to the given tasks. Use of literal translation of a single lexical item was a prevailing strategy that resulted into the production of correct collocations and incorrect collocations. Surprisingly enough, the use of literal translation of a single lexical item also led to the production of incorrect collocations. This indicates that L1 transfer of single lexical items does not always result into the production of correct collocations. A possible justification for this fact is that participants, most likely being unaware of collocational restrictions, used to transfer word for word to produce such combinations. Therefore, it is recommended, as Lewis (2000) proposed, that learners should aim at transferring chunk-for-chunk rather than word-for-word.

References


Appendix A
Sample Items

Directions: Complete each blank with an adjective or a verb which makes acceptable collocation with bold noun so that they express the meaning provided in the brackets below each item. Don’t use the adjectives or verbs from the parentheses. If you think more than one answer is possible, give all alternatives.

1. She was a(n) ……………. acquaintance of my family in Vienna.
   (= happening by chance without being planned)
2. Their new house is located in a(n) ……………. alley called Lisary.
   (= a small narrow street with no way out at one end)
3. In addition to fashion, Bond Street is also renowned for its auction houses and for its ……………. art galleries.
   (= forms of art, especially paintings or sculpture, that are produced and admired for their beauty and high quality)
4. Cigarette smoking can double our risk of dying from a heart attack and ……………. smokers are even more likely to die young.
   (= someone who smokes a lot.)
5. We were stuck in ……………. traffic for more than an hour.
   (= a large amount of traffic)
6. The cheese is firm in texture and has a(n) ……………. flavor.
   (= a resentful taste of a food or drink)
7. I’ll give you one ……………. chance and if you don’t bring it on Monday, you’ll be in trouble.
   (= a final time or situation which you can use to do something that you want to do)
8. The ……………. administration of company created many serious problems.
   (= not as good as it could be or should be)
9. I have had a(n) ……………. headache, and have not been able go to work for a month.
   (= a regular pain in your head)
10. The mother’s behavior has a(n) ……………. impact on the developing child.
    (= having a strong influence or effect)
11. I spent all morning ……………. housework.
    (= to perform an action or activity such as washing dishes or cleaning a house, etc.)
12. He ……………. an oath of allegiance to his adopted country.
    (= make this promise or swear)
13. Will you please ……………. your eye on my house while I’m on vacation?
    (= to look after someone or something and make sure that they are safe)
14. People with gray hair often ……………. it black.
    (= to give something like hair a different color using a dye)
15. I have found the best way to ……………. advice to your children is to find out what they want and then advise them to do it.
    (= to tell someone what they should do)
16. Statistics indicate that men are more likely to ……………. crime than women.
    (= to do something wrong or illegal)
17. Would you please ……………. me a favor and take this letter to the post office?
    (= something that you do for someone in order to help them or be kind to them)
18. I ……………. a very disturbing dreams last night.
    (= a series of thoughts, images, and feelings that you experience when you are asleep)
19. He ……………. revenge on his employers by setting fire to the factory.
    (= something you do in order to punish someone who has harmed or offended you)
20. We’ll ……………. whatever action is necessary.
    (= the process of doing something, especially in order to achieve a particular thing)
Appendix B
Sample Items

Directions: Complete each blank with an acceptable adjective + noun or verb + noun collocation considering the Persian equivalents provided. If you think more than one answer is possible, give all alternatives.

1. I think he comes from Germany because he a ………… German …………..
لهجه ی غلیظ
2. Everyone knows that a little …………… is sometimes necessary in a time of crisis.
دروغ مصلحتی
1. I was frequently sick through being forced to drink …………… that had been left standing out of refrigerator for hours.
کره ی فاسد
2. His lips were intensely smiling and his …………… shone.
دندان مصنوعی
5. There was a disgusting smell in the house - a bit like ……………
تخم مرغ گندی
6. There was a …………… in the output of journals and books and in the range of and demand for newspapers.
افواش سریع
7. The two women were …………… of the women’s union.
چهره ی یرجسته
8. You had better have your …………… extracted.
دندان خراب و فاسد
9. There was nothing else for breakfast, so I had to put up with a ……………
تخم مرغ آب پز
10. This cream is good for dry skin—that one would be better for ……………
پوست چرب
11. After a short ……………, the inspector agreed to pay the costs in cash from his local station funds.
بحث داغ
12. This debate is deep and serious, for it reflects …………… about the very nature of society and politics.
مخالفت اساسی
13. You need to wash …………… more often than you need to wash dry hair.
موی چرب
14. I don’t like to drive in the …………… on the motorway.
خط سبقت
15. Go home and think about whether you really want to have the operation -- I don’t want you to make any ……………
تصمیم عجولانه
16. Universities have to …………… student …………… for first-year students.
امکانات فراهم آوردن
17. She would have to …………… in order to improve their relationship.
ابتكار به خرج دادن
18. She ............... to a baby on Thursday.

19. Have you been ............... your ...............?

20. These chemicals have been found to ............... serious environmental ............... .

21. The property company ............... a huge ............... on the deal.

22. We all ............... to protect the environment.

23. I hate ............... at weekends.

24. He ............... and fell.

25. The problem was how to say ‘no’ to her without ............... .

26. I’m going to ............... and ask her if she wants to go out somewhere.

27. She ............... them a little ............... .

28. No final ............... has been ............... , but it seems likely that the two companies could merge in the near future.

29. It’ll ............... your father’s ............... if you tell him you’re giving up college.

30. The couple ............... not to talk about each other.

Appendix C

Self-Checklist Questionnaire

Directions: This self-check list questionnaire is a list of several strategies of language use and specifically communication strategies which are supposed to be employed by language users when dealing with vocabulary in general and collocations in particular. In table below you are provided with a list of strategies. Please look at the table and specify the strategy you think you have relied on in producing each collocation item. The strategy type or its number should be written in the Answer Sheets attached. If you think more than one strategy is applicable, please write it down.

For example, in answering the following item: ‘Even though, I had little grammatical knowledge, I could use my instinct to choose the right answer’, I used assumed synonymity which is the strategy number 2.
<table>
<thead>
<tr>
<th>Strategies</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Circumlocution and paraphrase</td>
<td>describing or exemplifying the target object or action</td>
</tr>
<tr>
<td>2. Assumed synonymity</td>
<td>is a word or phrase that means exactly or nearly the same as another word or phrase in the same language</td>
</tr>
<tr>
<td>3. Guessing</td>
<td>to assume, presume, or assert (a fact) without sufficient information.</td>
</tr>
<tr>
<td>4. Literal translation</td>
<td>translating literally a lexical item, an idiom, a compound word or structure from L1 to L2</td>
</tr>
<tr>
<td>5. L2 common and delexicalized words</td>
<td>are words such as <em>have</em> in <em>have a look</em> or <em>make</em> in <em>make a promise</em> whose original meaning disappears when they combine with certain nouns.</td>
</tr>
<tr>
<td>6. Overextension of L2 lexical items</td>
<td>the process of extending the application of a rule to items that are excluded from it in the language norm</td>
</tr>
<tr>
<td>7. Retrieval</td>
<td>the act or process of recovering specific information from stored data</td>
</tr>
<tr>
<td>8. Use of contextual information</td>
<td>the information based on the context, or surrounding words, phrases, and paragraphs, of the writing.</td>
</tr>
<tr>
<td>9. Description and definition</td>
<td>terms provided as clue to express the meaning of the missed lexical item</td>
</tr>
</tbody>
</table>