The Impact of Decision-making Tasks and Production Tasks
On the Collocational Knowledge of Iranian Intermediate EFL Learners

Esmail Zare Behtash*1
Masoume Etehadi2

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Abstract
The current study is an attempt to investigate the impact of decision-making (selecting and matching) tasks and production (creation of sentences and completion of sentences) tasks on the collocational knowledge of Iranian intermediate EFL learners. To this end, sixty EFL learners were divided into two experimental (decision-making and production) groups. To determine the effects of the tasks, the participants in the two groups were given the collocation pre-test aiming at examining their existing knowledge of collocation. After being exposed to the treatment, they were given the collocation post-test to measure the learners’ gained knowledge. The results of the paired-samples t-test revealed that both groups had manifested significant enhancement in their knowledge of collocation after the treatment. Furthermore the results of the independent-samples t-test indicated that the production group performed better than decision-making group. In other words, production tasks were more effective in increasing the collocational knowledge of the participants.

Keywords: collocation, collocate, decision-making task, production task

I. Introduction
In the history of language teaching and learning, Lexical Approach to language teaching placed more emphasis on presenting the words in language chunks rather than in isolation since language consists not of traditional grammar and vocabulary, but often of multiword chunks. One can think of chunks as a form of collocation. When the students learn the words, they need to use them in sentences. So, they need to know the appropriate words that collocate with them i.e. constraints on possible co-occurrences. Students should know that they cannot use every word as a collocate with other words. When the words are used together, they must sound natural. Gass and Selinker (2008) explain that individual words often appear together on a regular basis. For example, when native speakers of English confront with an economics article and see the word underdeveloped, they might predict that the next word will be nation or country. In other words, the adjective “underdeveloped” collocates with the nouns “nation” and “country”. It shows that the choice of the next word is quite narrow.

When speakers encode their conceptualizations in words and sentences, they use their competence, that is, the linguistic knowledge of phonological semantics, grammatical, and collocational properties

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1 Corresponding Author, Associate Professor of English Literature, Chabahar Maritime University, Email: behtash@cmu.ac.ir
2 M.A. Student of TEFL, Chabahar Maritime University, Email: Masoume.etehadi_90177101@yahoo.com
of words and syntactic structures (Schmid, 2007). How important is it to EFL learners to be able to speak English accurately? How important is it to them to write accurately in English? If these aims are really important to EFL learners, how can they achieve them? Learning collocation enables learners gradually to realize language chunks used by native speakers in speech and writing and to get the feel of using words in natural combination with other words as well. According to Davies and Elder (2004), a problem for even advanced language learners is that they may speak grammatically, yet their language use does not sound native-like, because it deviates from native speaker collocational norms.

Advanced learners’ knowledge of vocabulary is at a high level, so they may use different words for the same meaning. They should be aware of collocational norms. Regarding this, Boers and Lindstromberg (2009) state that even advanced learners who have learned a great many words and grammar rules often fail to combine words in the way native speakers do. Learners should learn the new words with their collocates and practice them in different contexts.

Regarding this study that focused on teaching collocation, the researchers considered two types of tasks: decision-making tasks i.e. selecting and matching tasks, and production tasks i.e. creation of sentences and completion of sentences. In fact, the researchers seek to know if there is any significant difference between the impacts of these two kinds of tasks on the collocational knowledge of learners, and to what extent they can improve learners’ collocational knowledge.

2. Background

Collocations are defined as some pairs or groups of words co-occur with very high frequency, depending perhaps on the text-type of the data. Most typically, this feature is associated with verb-noun and adjective-noun pairs, but it can apply to word groups larger than pairs and to words from most grammatical categories (Coady & Huckin, 1997). According to Schmitt and McCarthy (1996), collocations vary in strength from frozen and absolute (as in kick the bucket) through strong and restricted (blonde hair) to weak (nice hat). Gairns and Redman (1986) suggest that word may co-occur simply because the combination reflects a common real world state of affairs, e.g. pass and salt collocate because people often want other people to pass them the salt. Other collocations have an added element of linguistic convention, e.g. English speakers have chosen to say that lions roar rather than bellow. According to Fairclough (2003), different discourses may use the same words but they may use them differently, and again it is only through focusing upon semantic relations that one can identify these differences. He states that one way of getting at this relational difference is through looking at collocations, patterns of co-occurrence of words in texts, simply looking at which other words most frequently precede and follow any word which is in focus, either immediately or two, three and so on words away. Cowie and Howarth (1995, cited in Schmitt, 2000) suggest that the lexical phrases in language can be placed on a 4-level scale of complexity (Table 1).

<table>
<thead>
<tr>
<th>Table 1. Levels of Collocational Complexity</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Idiom</td>
</tr>
<tr>
<td>bite the dust, shoot the breeze</td>
</tr>
<tr>
<td>2. Invariable collocation</td>
</tr>
<tr>
<td>break a journey, from head to foot</td>
</tr>
<tr>
<td>3. Collocation with limited choice at one point</td>
</tr>
<tr>
<td>take/have/be given precedence [over noun phrase]</td>
</tr>
<tr>
<td>give/allow/permit access to [noun phrase]</td>
</tr>
<tr>
<td>have/feel/experience a need [for noun phrase]</td>
</tr>
</tbody>
</table>

Cowie and Howarth (1995, cited in Schmitt, 2000) suggest that the lexical phrases in language can be placed on a 4-level scale of complexity (Table 1).
Randall says that “the native speaker’s knowledge of the relationship between words and their immediate neighbors built up through extensive experience with the language, allows them to chunk the incoming text, thus reducing the processing cost of working memory” (Randall, 1946, p. 92). He suggests that the solution would seem to be for the second language learner to progressively process larger and larger chunks of text, either written or oral. Troike (2006: 150) says: “these chunks of language are typically memorized as holistic units, and often without recognition of individual words or analysis of how they are combined”.

Schmitt (2000) states that one of the most important new trends in vocabulary studies is the realization that words act less as individual units and more as part of lexical phrases in interconnected discourse and these lexical phrases in language reflect the way the mind tends to “chunk” language in order to make it easier to process. Richards and Rodgers (2014) state that

Lexical Approaches in language teaching reflect a belief in the centrality of the lexicon to language structure, second language learning, and language use, and in particular to multiword lexical units or “chunks” that are learned and used as single items. (Richards & Rodgers, 2014, p. 132)

They say that the role of collocation is important in lexically based theories of language. According to Carstairs-McCarthy (2002), collocational restriction is

restriction whereby a word, in the context of or when collocated with another specific lexeme, has a literal meaning different from its usual one. For example, the meaning “not sweet” for the adjective dry is restricted to the collocation dry wine. (Carstairs-McCarthy, A., 2002, p. 142)

Walker (2011) showed that how corpus-based investigation of the collocational behavior of key lexis can be used to help in the teaching of business English. He states that the study of the collocations associated with a group of synonyms makes it possible to identify slight but significant differences in the meaning of the words in the group. In other words, a corpus-based study of the collocational behavior of a word can identify the different meanings or uses of that word and whether it is associated with any negative prosody or similar connotational associations.

Also, according to Geeraerts (2007), a collocational approach to lexical description, systematically identifying different meanings through differences in collocational patterns, is a methodological focus for many current lexicographical projects. Teachers should provide contexts that contain recently new words with new collocations. Also Richards and Renandya (2002) state that memorizing collocations, phrases and sentences containing a word is included in language-focused instruction.

Thornbury (1988) mentioned that there are many different kinds of tasks that help the learners to move words into long-term memory. Some of these tasks will require more brain work than others and they will be more cognitively demanding. Richards and Rodgers (2014) stated that activities should draw student’s attention to lexical collocations and seek to enhance their retention and use of collocations. Also Woolard (2000, cited in Richards & Rodgers, 2001) suggested that teachers should reexamine their course books for collocations and add exercises that focus explicitly on lexical phrases. In this paper, we consider decision-making tasks and production tasks.

According to Thornbury (1988), tasks in which learners make decisions about words can be divided into these types, arranged in an order from least cognitively demanding to most demanding: identifying, selecting, matching, sorting, ranking and sequencing. He explained these tasks as follows:
identifying words simply means finding them where they may be hidden, such as in texts. A matching task involves first recognizing words and then pairing them with for example a visual representation, a translation, a synonym, an antonym, a definition, or a collocate. In ranking and sequencing tasks, the learners put the words into some kind of order. Sorting tasks require learners to sort words into different categories. According to Lewandowska-Tomaszczyk (2007), sorting tasks show the relatedness between words and sentences at different levels of granularity by means of hierarchical clustering analysis, similarity judgments involving a scale between completely different and absolutely identical, and acceptability judgments. Pederson (2007) said that in sorting tasks, the subject is presented with a number of stimuli and is asked to group them into categories. These categories may be ad hoc (subject determined) or preselected (researcher determined). Multiple strategies may be used for the sorting task which give different sorting results. The most common variant of the sorting task presents a single stimulus to the subjects and asks them to group it with either of two other stimuli or stimuli sets; that is, does stimulus X group better with A or with B? Randall (1946) exemplified some experiments in which lexical decision tasks were used. In such experiments, participants were presented with a ‘prime’ word, e.g. NURSE, which is then removed, and then asked to make a decision as to whether target word, e.g. DOCTOR is a real word or not (the lexical decision task). In general, Thornbury (1988) said that selecting tasks are cognitively more complex than identification tasks, since they involve both recognizing words and making choices among them.

According to Thornbury (1988), tasks that are productive are those in which the learners are required to incorporate the words into some kind of speaking or writing activity. These tasks can be classified as two main types: completion of sentences and texts - creation of sentences and texts. He stated that sentence and text completion tasks are generally known as gap-fills. In these tasks, the context is provided. Sentence and text creation tasks require learners to create the context for given words. These tasks lead naturally into speaking activities e.g. reading aloud, performing dialogues to the class, comparing and explaining sentences in pairs or small groups. Boers and Lindstromberg (2008) said that productive tasks are particularly likely to result in productive word knowledge but in time-constrained classroom settings and in majority of FLT settings, it is difficult to ensure that wholly communicative task-based instruction will trigger use of any given item sufficiently often for productive knowledge of it to develop. According to Ellis (2003), samples elicited by means of blank-filling exercises are likely to reflect the learners’ attention to accuracy whereas samples elicited by means of some kind of communicative activity are more likely to reflect how learners use the L2 for message conveyance. Levenston (cited in Schmitt, 2000) found that native speakers relied on collocational criteria to a large extent when they responded to a completion task.

In the present study, the researchers seek to answer this question: how differently and to what extent can decision-making tasks and production tasks affect the collocational knowledge of Iranian intermediate EFL learners. In other words, the researchers seek to answer these questions:

1) do decision-making tasks have a significant effect on the collocational knowledge of Iranian intermediate EFL learners?

2) do production tasks have a significant effect on the collocational knowledge of Iranian intermediate EFL learners?

3) do decision-making tasks and production tasks have significantly different effects on the collocational knowledge of Iranian intermediate EFL learners

Again it should be mentioned that among decision-making tasks, the researchers used selecting and matching tasks. Also as production tasks, creation of sentences and completion of sentences were used in this study.

3. Methodology
Participants

All participants of this study were Iranian intermediate EFL learners in Chabahar Maritime University. They were aged between 18 and 26. Their language proficiency level was established through Nelson Proficiency Test. Prior to the experiment, all participants took a pre-test of collocation. This study involved both male and female participants. They were divided into two experimental groups (decision-making group = 30, production group = 30). These learners were encouraged to participate in some free sessions in which their knowledge of collocation would be evaluated and also it would be improved by doing some tasks i.e. decision-making and production tasks.

Design

This research is quasi-experimental in nature, for it was not possible for the researchers to select the participants for this study in random. Since this study is quasi-experimental, the conclusions should be cautiously interpreted. The participants, whose scores indicated the intermediate level according to the point scale of the Nelson proficiency test, entered the experiment. Table 2 illustrates the results of this test. The mean score of the participants was 38.05. They answered at least sixty percent of the questions correctly. It means that they got the passed score according to Nelson scoring scale. The standard deviation looks at the average variability of all scores around the mean; it was 4.706 for the results of Nelson Proficiency Test.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nelson Proficiency Test</td>
<td>60</td>
<td>38.05</td>
<td>4.706</td>
<td>.608</td>
</tr>
</tbody>
</table>

A pre-test of collocation was used as the other required instrument in this study. In order to determine the effect of the two task types, the researchers needed to compare the results of the performance of the participants in the collocation test before and after receiving the treatment. All participants were given this pre-test prior to the treatment to ensure the comparability of the two groups’ collocational knowledge at the beginning of the study. After conducting the pre-test of collocation and based on the participants’ scores, the researchers divided the participants into two groups in a way that the homogeneity of the two groups in the case of collocational knowledge was established. This test consisted of two subtests: lexical collocations and grammatical collocations, each one consisting of 45 items. Each subtest had three subsections which presented a different test task: 15 multiple-choice items, 15 gap-filling items and 15 gap-filling items accompanied by Persian translation. This test was developed by Salimi, Tavakoli, and Ketabi (2011) in a Ph.D thesis. It should be noted that the collocation pre-test was the same as the collocation post-test. This test was attached as appendix A.

Materials

The content of collocation materials used for this study was the same for both groups. The difference was in the case of task type. The content of some tasks were selected from two books, namely *English Collocations in Use (intermediate level)* and *English Collocations in Use (advanced level)*. The content for the other tasks were created by the researchers. The sentences for these tasks were selected from the above two mentioned books and from *Key Words for Fluency (Intermediate Collocation Practice)*, *Collins Cobuild Advanced Learner’s English Dictionary*, and *Oxford Collocations Dictionary*. In addition to these books, the researchers used these two internet sources too: *The British National Corpus (BNC)* and *The Corpus of Contemporary American English (COCA)*. This study was conducted in Chabahar Maritime University. The course consisted of six sessions for each group out of the university curriculum and it was only for the research purpose. The treatments focused on the test content i.e. the participants practiced the test content through decision-
making tasks (selecting and matching) and production tasks (creation of sentences and completion of sentences).

Treatment for the Decision-making Group

In the treatment for the decision-making group, the participants were given decision-making tasks. Among different types of decision-making tasks, this group practiced only selecting and matching tasks. As an example, the participants were asked to select the appropriate word that collocates with the bold word. In these tasks, the participants used the word receptively as they needed to recognize them in the sentences. In another exercise, they matched parts of collocations using two columns. Then they were asked to match them to the appropriate definition.

Examples of selecting task:

She had a **blank / bare / empty** expression on her face. (Showing no understanding or emotion)

He was always impressed by the **salient / stunning / striking** resemblance between his Uncle Julian and his father. (Very similar)

I didn’t want to **take/pass up/get** the **opportunity** of seeing Hong Kong. (Fail to take advantage of)

Examples of matching task:

Match the words to form collocations. Then match them to the definitions.

<table>
<thead>
<tr>
<th>blank</th>
<th>the opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>striking</td>
<td>expression</td>
</tr>
<tr>
<td>pass up</td>
<td>resemblance</td>
</tr>
</tbody>
</table>

**a)** two things or people which look very similar

**b)** a person’s face which shows no emotion

**c)** fail to take advantage of

Treatment for the Production Group

In the treatment for the production group, the participants were given two tasks: creation of sentences and completion of sentences. As an example, the participants were asked to write the appropriate word that collocates with the bold word and then they were asked to write the appropriate collocation for each definition. In these tasks, the participants used the words productively as they had to use them in order to create sentences and completing the sentences.

Examples of completion task:

She had a **b.**.......... **expression** on her face. (Showing no understanding or emotion)

He was always impressed by the **s.**......... **resemblance** between his Uncle Julian and his father. (Very similar)

I didn’t want to **p.**........ **the opportunity** of seeing Hong Kong. (Fail to take advantage of)

Examples of creation of sentences:

Write an appropriate collocation for each definition.
a. two things or people which look very similar

b. a person’s face which shows no emotion

c. fail to take advantage of

Post-test of Collocation
After receiving six sessions of treatment, one session per week, a test of collocational competence was administered as the post-test to determine the participants’ knowledge of English collocations after the treatment. To reduce the effect of taking the pretest on the performance of students, there was a time interval about eight weeks.

IV. Results
Performance of the participants on the pre-test of collocation

As it was mentioned before, after conducting the pre-test of collocation, the researchers divided the participants into two groups based on their scores, i.e. in a way that they were homogeneous. Table 3 and 4 show this homogeneity.

Table 3. Results of the Collocation Pre-test of the Two Groups

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>Decision-making Group</td>
<td>30</td>
<td>19.13</td>
<td>3.674</td>
<td>.671</td>
</tr>
<tr>
<td></td>
<td>Production Group</td>
<td>30</td>
<td>19.40</td>
<td>3.663</td>
<td>.669</td>
</tr>
</tbody>
</table>

The mean and standard deviation for the decision-making group were 19.13 out of 90 and 3.674 respectively. For the production group, the mean was 19.40 out of 90 and standard deviation was 3.663. However, since descriptive statistics does not show if there exists any significant difference between these groups, the researchers had to conduct an independent-samples t-test, the results of which are presented below.

Table 4. Independent-samples T-test Results of the Collocation Pre-test of the Two Groups

<table>
<thead>
<tr>
<th>Levene’s Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
<td>t</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.011</td>
<td>.919</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-test</td>
<td>.282</td>
<td>.779</td>
</tr>
<tr>
<td></td>
<td>.282</td>
<td>58.000</td>
</tr>
</tbody>
</table>
The signif icance level is .779 which is bigger than .05, \( p > .05 \). In other words, the two groups proved to be homogeneous at the beginning of the study.

**Performance of decision-making group on pre-test and post-test.**

To answer research question one, which related to the possible effect of decision-making tasks on the collocational knowledge of the participants, this null hypothesis was tested: decision-making tasks have no significant effect on the collocational knowledge of the intermediate EFL learners. In this hypothesis, decision-making tasks and collocational knowledge of the participants comprised the independent and dependent variables, respectively. Paired-samples \( t \)-test analyses were carried out to investigate any significant difference between the scores of the pre-test and post-test of the decision-making group.

<table>
<thead>
<tr>
<th>Table 5. Results of the Performance of Decision-making Group on the Pre-test and Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paired Samples Statistics</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Pair 1</strong></td>
</tr>
<tr>
<td>Decision-making Group`s Pre-test</td>
</tr>
<tr>
<td>Decision-making Group`s Post-test</td>
</tr>
</tbody>
</table>

The mean values in the pre-test and post-test for the decision-making group are 19.13 and 54 respectively (\( \text{Mean}_{\text{pre-test}} = 19.13, \text{Mean}_{\text{post-test}} = 54 \)). In other words, the decision-making group`s mean score increased from 19.13 to 54 after the treatment which shows a considerable progress in the participants` collocational knowledge.

<table>
<thead>
<tr>
<th>Table 6. Paired-samples T-test Results of the Performance of the Decision-making Group on the Pre-test and Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Paired Differences</strong></td>
</tr>
<tr>
<td>Mean</td>
</tr>
<tr>
<td>---------------------------------------------------------------</td>
</tr>
<tr>
<td><strong>Pair 1</strong></td>
</tr>
<tr>
<td>Decision-making Group<code>s Pre-test - Decision-making Group</code>s Post-test</td>
</tr>
</tbody>
</table>

The results of the paired-samples \( t \)-test indicated the significance level of .000 which is smaller than .05, \( p < .05 \). The results indicated that there was statistically significant difference between the participants’ performance on the pre-test and post-test in decision-making group. In other words, the results for the performance of decision-making group revealed that there was a statistically significant difference between the participants’ performance on the pre-test and post-test, so the first null hypothesis was rejected. It can be concluded that decision-making tasks have increased the collocational knowledge of this group and they have been an effective factor.

**Performance of production group on the pre-test and post-test.**

The second research question aimed at finding the possible effects of production tasks on the collocational knowledge of the participants. This null hypothesis was tested for this question: production tasks have no significant effect on the collocational knowledge of Iranian intermediate
EFL learners. In this hypothesis, production tasks and collocational knowledge of Iranian intermediate EFL learners were the independent and dependent variables, respectively. Paired-samples t-test analyses were carried out to test this hypothesis and investigate any significant difference between the scores of the pre-test and post-test of the production group.

Table 7. Results of the Performance of the Production Group on the Pre-test and Post-test

<table>
<thead>
<tr>
<th>Paired Samples Statistics</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Group’s Pre-test</td>
<td>19.40</td>
<td>30</td>
<td>3.663</td>
<td>.669</td>
</tr>
<tr>
<td>Production Group’s Post-test</td>
<td>60.80</td>
<td>30</td>
<td>11.693</td>
<td>2.135</td>
</tr>
</tbody>
</table>

The mean values for the production group in the pre-test and post-test are 19.40 and 60.8, respectively ($Mean_{pre\_test} = 19.40, Mean_{post\_test} = 60.8$). In the pre-test, the average variability of all scores around the mean i.e. standard deviation is 3.663, and it is 11.693 in the post-test ($SD_{pre\_test} = 3.663, SD_{Post\_test} = 11.693$).

Table 8. Paired-samples T-test Results for the Performance of Production Group on the Pre-test and Post-test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Production Group’s Pre-test - Production Group’s Post-test</td>
<td>41.40</td>
<td>12.574</td>
<td>2.296</td>
<td>36.705 - 46.095</td>
<td>18.034</td>
<td>29</td>
<td>&lt;.000</td>
</tr>
</tbody>
</table>

The significance level is .000 i.e. $p < .05$ which testifies the improvement in the collocational knowledge of the participants in production group. Based on these results, the production tasks used in this group have been an effective factor. So, the second null hypothesis was rejected.

Performance of decision-making group and production group on the post-test.

The third question aimed at finding whether decision-making tasks and production tasks have significantly different effects on the collocational knowledge of Iranian intermediate EFL learners. This null hypothesis was tested for this question: decision-making tasks and production tasks do not have significantly different effects on the collocational knowledge of Iranian intermediate EFL learners. In this hypothesis, decision-making tasks and production tasks were independent variables and collocational knowledge of Iranian intermediate EFL learners was dependent variable. Independent-samples t-test analyses were carried out to test this hypothesis and investigate any significant difference between the scores of the post-test of the both groups.

Table 9. Results of the Collocation Post-test of the Two Groups

<table>
<thead>
<tr>
<th>Group Statistics</th>
<th>Groups</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Post-test</td>
<td>Decision-making Group</td>
<td>30</td>
<td>54.00</td>
<td>12.889</td>
<td>2.353</td>
</tr>
</tbody>
</table>
The mean of the decision-making group is 54, and it is 60.8 for the production group. The standard deviation of the decision-making group is 12.889, and it is 11.693 for the production group.

Table 10. Independent-samples T-test Results of the Collocation Post-test of the Two Groups

<table>
<thead>
<tr>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.427</td>
</tr>
<tr>
<td>Equal variances not assumed</td>
<td>2.140</td>
</tr>
</tbody>
</table>

The significance level is .037 which is smaller than .05, \( p < .05 \). The results showed that decision-making group and production group had significantly different effect on the collocational knowledge of Iranian intermediate EFL learners. Hence, the third null hypothesis was rejected. Figure 1 illustrates the overall results of the mean of the two groups in the pre-test and post-test of collocations.

![Figure 1. The overall results of the mean of the two groups in pre-test and post-test](image)

V. Discussion, Conclusion and Implications
As it was stated before, this study examined the impact of decision-making tasks and production tasks on the collocational knowledge of Iranian intermediate EFL learners. The researchers used two types of tasks i.e. decision-making tasks (selecting and matching) and production tasks (creation of sentences and completion of sentences). By conducting a collocation pre-test for this study, the two groups proved to be homogeneous at the beginning of the study and there was no significant difference between the two groups in terms of their collocational knowledge. The results for the performance of decision-making group revealed that there was a statistically significant difference between the participants’ performance on the pre-test and post-test. It can be concluded that decision-making tasks have increased the collocational knowledge of this group and they have been an effective factor. Also, the results showed that the production tasks used in production group improved the collocational knowledge of the participants in the production group. The results of this study illustrated that production tasks had greater effect than decision-making tasks.

It should be mentioned that the results of this study showed the participants’ weak performance on the pre-test. Levenston (cited in Schmitt, 2000) stated that even advanced L2 were much less likely to respond with collocational based answers. Granger (1998, cited in Schmitt, 2000) found that in identifying the most common collocates, the natives were much more confident and the most appropriate collocational combinations are often not very salient for nonnatives. Ädel and Erman (2012) stated that recurrent word combinations are more frequent overall in native than non-native production, and certain groups of recurrent word combinations are typically found to be underused by non-native speakers e.g. conventionalized adverb + adjective combinations.

Dramatic changes in the participants’ scores in the post-test in comparison with the pre-test point to the fact that decision-making tasks and production tasks can be used as effective explicit methods of teaching collocations in English classrooms. In explicit instruction of vocabulary, decision-making tasks can provide opportunities for elaborating word knowledge. In his study, Mueller (2011) concluded that at a practical level, learners rapidly gain accuracy in semantically complex areas of the L2 due to implicit learning based on large amounts of input and instructors may need to encourage students to read and listen more and expose them to English in a wider range of contexts, but learners in non-intensive EFL courses may require instruction that explicitly targets semantically opaque forms. Boers and Lindstromberg (2008) stated that lexis is likely to remain inadequately learned in the absence of explicitly form-focused instruction. They said that there is empirical evidence that explicit form-focused instruction can facilitate the learning of L2 collocations, an outcome which seems especially likely in cases where the L1 sets up wrong expectations.

Teachers can focus on the appropriate collocations to be used in certain contexts and direct students’ attention to the restrictions related to the use of these collocations in production tasks. Hill (2000, cited in Richards & Rodgers, 2001) states some classroom procedures. He suggests that individual collocations should be taught and students should be made aware of collocation. Furthermore, what students already know should be extended by adding knowledge of collocation restrictions to known vocabulary and also in order to store collocations, students should be encouraged to keep a lexical notebook. As Coady and Huckin (1997) state, several studies have found that there is a need for multiword phrases to be learned explicitly. Boers and Lindstromberg (2008) believe that lexis is likely to remain inadequately learned in the absence of explicitly form-focused instruction. There is empirical evidence that explicit form-focused instruction can facilitate the learning of L2 collocations, an outcome which seems especially likely in cases where the L1 sets up wrong expectations. They exemplify that French EFL learners commonly mirror the French *dependre de* by saying *depend from* instead of *depend on*. They are likely to persist in this mistake unless it is made the object of explicit form-focused instruction.

Thornbury (1988) noted that production tasks involve many of the processes that serve to promote retention in long-term memory, such as rehearsal, repetition and explanation. One reason behind the effectiveness of production tasks in improving collocational knowledge might be the stimulating
nature of this type of tasks. These tasks push learners forward to produce something in response to a stimulus. They can particularly be effective for those aspects of language competence in which reception does not play a key role. Some parts of language competence are mainly based on receptive skills of learners. For example, the ability of learners to listen to a lecture and get the main idea is mainly reliant on receptive skills. However, in the case of ability of learners to use collocational patterns, production tasks seem to be more effective. Thornbury (1988) states that the decision-making tasks are principally receptive and learners make judgement about the words, but don’t necessarily produce them. Also he said that “because of the two-part nature of collocations, any matching activities lend themselves to work on them” (p. 121). As Richards and Renandya (2002) state, there are exercises such as matching parts of collocations using two columns, completing collocations as a cloze activity and playing collocation crossword puzzles that can deepen learners’ knowledge of words as well.

As conclusion, the findings of this study indicated the significant effect of both task types on the collocational knowledge of Iranian intermediate EFL learners. The results provided evidence that the production group performed better than decision-making group in the post-test. In other words, production tasks were more effective in increasing the collocational knowledge of the participants. The results of this study also provide support for the effect of explicit teaching of collocation. It is concluded that explicit teaching of collocations can enhance learners’ collocational knowledge. Decision-making tasks and production tasks can be used as effective methods for explicit teaching of collocations. Both of these tasks are effective factors in increasing the collocational knowledge of EFL learners.

The current study has some teaching implications. It shows that collocations can be taught explicitly in EFL contexts. Considering the role of collocations in improving language learners’ fluency and accuracy, teachers should take into account explicitly teaching collocations. In an EFL context, learners are mostly deprived of having enough exposure to English language so teachers should encourage the learners to be aware of collocations. This study recommends some courses of action for EFL teachers and material designers in order to enable them to choose the best method to teach collocations. Considering the role of collocations in improving language learners’ fluency and accuracy, teachers need to take into account explicitly teaching collocations. In the case of EFL teachers, this study encourages them to teach collocation via employing appropriate task types. A combination of decision-making tasks and production tasks is supposed to be more efficient in facilitating collocation teaching and learning. In this case, students are required to practice what is taught through doing some tasks and activities. The findings of this study have useful implications for ELT material designers as they design textbooks for EFL learners. It is suggested that authentic materials should be provided for EFL learners to involve them in every day and real life topics. The exercises should be designed using both decision-making and production task types. Therefore, it is necessary to include authentic and tangible materials and appropriate tasks in the textbooks for collocation teaching and learning.

References


Appendix A

Test of Collocational Competence (TCC)

The Test of Collocational Competence (TCC) has been developed to measure your knowledge of English collocations. The test consists of two subtests: Lexical Collocations and Grammatical Collocations each consisting of 45 items. Each subtest has three subsections each presenting a different test task. The instructions for each subsection will be provided in the relevant section. You will have 70 minutes to complete the whole test.

Section One: Lexical Collocations

Instructions: This section of the test is designed to measure your knowledge of lexical collocations in English. It consists of three parts and there are special instructions for each part. Altogether, there are 45 questions in this section, and you will have 35 minutes to answer them.

Part I
Directions: Each question in part I consists of a sentence in which one word is omitted. Also, in each question, there is a word or phrase written in **bold** type. There are four options, marked a, b, c and d for each missing word. You are to choose the one word which habitually co-occurs with the bold type word or phrase in the sentence, and mark the answer in the answer sheet.

An example has been provided.

Example: Don’t tell Ben about my plans for the evening. You know he can’t ____________________________ a secret.
   a. save          b. keep          c. hold          d. stop

In this example, since the word **keep** habitually co-occurs with the phrase “a secret”, it makes up a collocation in English. Therefore, the correct answer is **b**.

1. Smoking can ______________* damage* your health.
   a. alternatively   b. frequently   c. seriously   d. adequately
2. Pollution in the atmosphere ______________* serious health problems* for many people.
   a. makes          b. holds         c. builds       d. poses
3. He had to stop work because of ______________* health*.
   a. weak           b. poor          c. thin        d. bitter
4. He was sent to prison for a crime that he didn't ______________*.
   a. do             b. commit        c. make         d. conduct
5. He stands ______________* of* lying to the nation's parliament.
   a. accused        b. charged       c. suspected    d. assured
6. She ______________* her ambition* to run the 10,000 meters in under 30 minutes.
   a. obtained       b. admired       c. fulfilled    d. retained
7. While the baby slept, she ______________* advantage of* the moment's peace to read her book.
   a. used           b. took          c. got          d. made
8. Developing and manifesting a/an ______________* attitude* makes life happier and more successful.
   a. effective      b. extensive     c. attractive    d. positive
9. He hasn't produced a single ______________* of* writing this year.
   a. slice          b. bit           c. piece       d. slip
10. Many short rivers ______________* into* the Pacific Ocean.
    a. drop           b. flow         c. pour        d. shed
11. Those who litter public places should be punished a. severely  
   b. simply  
   c. strangely  
   d. safely

12. By the end of his reign, he had a. crashed  
   b. broken  
   c. cracked  
   d. interrupted all his promises.

13. She had to a. make  
   b. create  
   c. develop  
   d. grow a whole new set of skills when she changed job.

14. They think she killed her husband, but they have no a. concrete  
   b. rough  
   c. strict  
   d. sure evidence.

15. Someone who is constantly surrounded by people may still feel a. significantly  
   b. desperately  
   c. remarkably  
   d. publicly lonely.

Part II

Instructions: Each question in part II consists of a sentence in which one word is omitted but the first two letter of the word are given. Also, in each question, there is a word or phrase written in bold type. You are required to supply the missing word which habitually co-occurs with the bold type word or phrase in the sentence. After you decide which word suits the blank, write it on your answer sheet. An example has been provided.

Example: I did not fu--------------- comprehend what had happened.

The most appropriate word which begins with the two letters fu and habitually co-occurs with comprehend is fully.

16. I’m tr--------------- sympathetic to what happened to your brother’s best friend.
17. No one has yet cl--------------- responsibility for yesterday's bombing.
18. I would like to apologize most si--------------- for any inconvenience caused.
19. Our culture is cl--------------- associated with religion.
20. The new computer system will me--------------- all our requirements.
21. He has a st--------------- sense of responsibility to his job as a teacher.
22. Price rise is always a hi--------------- sensitive issue in a political sense.
23. He finds it difficult to ma--------------- lasting friendships.
24. Morality is an es--------------- feature of human life.
25. He had re--------------- entirely faithful to his wife.
26. The research pr--------------- new insights into the way we process language.
27. The team paid a he--------------- price for its lack of preparation.
28. The professor ga--------------- an interesting talk on bird migration.
29. Her proposal ra--------------- serious doubts in my mind.
30. It was warmer now, and the snow was beginning to me---------------.

Part III

Instructions: Each question in part III consists of a sentence in which one word is omitted. Also, in each question there is a word or phrase in bold type. The missing word together with the bold type word or phrase constitutes a collocation. A Persian equivalent of the collocation in question is provided at the end of each sentence as a clue. Supply the missing word based on the translation given. Write the answer on your answer sheet. An example is provided.

Example: After hours of heated debates the two companies have finally reached an agreement. (بته توافق رسیدى)

The most appropriate word which constitutes a collocation with an agreement for the Persian equivalent provided is reached.

31. The school is in -------------- need of some new computers. (نیاز فوری/ضروری)
32. Julian lost his--------------- and fell. (تعدل را از دست دادن)
33. The government had decided to -------------- measures to control the increasing prices.
Section Two: Grammatical Collocations

**Instructions:** This section of the test is designed to measure your knowledge of grammatical collocations in English. It consists of three parts and there are special directions for each part. Altogether, there are 45 questions in this section, and you will be given 35 minutes to complete the test.

**Part I**

**Instructions:** Each question in part I consists of a sentence in which one word is omitted. Also, in each problem, there is a word or phrase in bold type. There are four options, marked a, b, c, and d for each missing blank. You are to choose the one option which habitually co-occurs with the bold type word or phrase in the sentence. Mark the answers in the answer sheet.

An example is provided.

Example: I eventually realized I had to change my attitude ------------------ medical practice.

- a. toward
- b. in
- c. with
- d. for

In this example, since the preposition toward habitually co-occurs with the word attitude, it makes up a collocation in English. Therefore, the correct answer is a.

1. Teachers who use drama are working in partnership ------------------ pupils.
   - a. with
   - b. to
   - c. for
   - d. by

2. I eventually realized I had to change my ------------------ medical practice.
   - a. attitude toward
   - b. opinion to
   - c. view for
   - d. idea of

3. He’s still very enthusiastic ------------------ his new job.
   - a. in
   - b. at
   - c. with
   - d. about

4. I never have time to read ------------------ pleasure.
   - a. at
   - b. for
   - c. in
   - d. to

5. They closed the road in an attempt ------------------ traffic in the city.
   - a. to reducing
   - b. in reducing
   - c. to reduced. for reducing
   - d. of

6. To achieve full respect for human rights, it is essential ------------------ everyone of us receive adequate human rights education.
   - a. for
   - b. to
   - c. that
   - d. of

7. He doesn’t find it easy ------------------ about his personal feelings.
   - a. talking
   - b. to talk
   - c. for talking
   - d. talk

8. Differences of opinion are often the most difficult problem ------------------.
   - a. resolving
   - b. to resolve
   - c. resolve
   - d. resolves

9. She decided to devote herself ------------------ him as he leapt from one peak to another.
He based his conclusions on the evidence given by the captured prisoners.

Pip acted as if he was better than everyone else.

I’d rather have a quiet night in front of the TV.

He informed his students that the examination had been cancelled.

Many of the poor acknowledged their spiritual leader.

Did he actually meet Jenny that night?

Yates is struggling to recover from a serious knee injury.

She had just enough energy to get through the day.

She’s rather worried about her son’s studies.

It was very nice of you to do the shopping for me.

Human beings are different from other animals.

Money isn’t the solution to every problem.

They put pressure on him to change his decision.

If you look after your clothes, they last a lot longer.

The company ran into trouble when it tried to expand too quickly.

I couldn’t hear them saying most of the time.

I’ve gone through the problem several times, but I can’t think of a solution.

It’s difficult to describe how I feel.

Perhaps we should commit these ideas to paper before we forget them.

He can’t decide whether to buy it or not.

People have a right to decide where to spend their own money.

Part III

Instructions: Each question in part III consists of a sentence in which one word is omitted. Also, in each question there is a word or phrase written in bold type. The missing word together with the bold type word or phrase constitutes a collocation. A Persian equivalent of the collocation in question is provided at the end of each sentence as a clue. Supply the missing word based on the translation given. Write the answer on your answer sheet. An example is provided.

Example: It is to your advantage to invest wisely. (بَ ًفغ کسی)

The most appropriate word which constitutes a collocation with your advantage for the Persian equivalent provided is to.
31. I try to help my mother the housework and the shopping.
32. They fought bravely the enemy.
33. Susan felt slightly annoyed herself.
34. They argued stricter punishments.
35. The man was leaning his car.
36. It must be difficult to cope three small children and a job.
37. We haven’t heard her for ages.
38. My mother says she’s looking meeting you.
39. Janet was surprised quickly the time passed.
40. I’ve always up to Bill for his courage and determination.
41. It is possible to without food for a few days.
42. Have you working as a journalist?
43. She is charged murdering her husband?
44. It’s the law to leave children under a certain age alone in the house.
45. They soon got the situation control.

Esmail Zare Behtash is an associate professor of English literature at Chabahar Maritime University, Chabahar, Iran. He has instructed BA, MA, and PhD courses at this university for many years. His main areas of research are stylistics, the language of literature, lexicography, and the Victorian literature.

Masoume Etehadi is an M.A. student of TEFL at Chabahar Maritime University. His main areas of research are collocations, teaching and learning English as a foreign language.