




The Effects of Receptive and Productive Learning Tasks on EFL Learners' Knowledge of Collocation and Meaning

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Abstract

Collocations are one of the important components of native speaker competence. For this reason, there have been many studies investigating explicit teaching methods of them. However, most of them did not focus on receptive and productive tasks independently. This study aims to explore the effectiveness of receptive and productive vocabulary tasks on learning collocation and meaning in an EFL setting. Turkish EFL learners participated in the study and they were randomly assigned to receptive task, productive task and control groups. The receptive task group read three glossed sentences for each of the 20 target collocations and the productive task group completed a cloze task. The results showed that both tasks were effective to lead to learning gains in collocation and meaning. Although the results were not significant, the participants in the receptive task group were able to reach higher scores on receptive knowledge of collocation and meaning than on the productive ones.

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1. Introduction

1.1. Knowledge of Collocations

Collocations, which can be defined as “word combinations” (Nesselhauf, 2003) or “a group of two or more words that occur frequently together” (Shin, 2007), have an essential role in foreign language education. As stated by Nesselhauf (2005), they have some important functions. First, since they seem to be the basis for the development of creative language in the first language, they have an essential role in language learning. Second, they are essential for fluency in both speaking and writing. If the learners of the language do not have collocation knowledge, they frequently need to use a dictionary or concordancer and this hinders fluency. Furthermore, knowledge of collocation also helps comprehension. The more pre-

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fabricated units the learners have, the better they can understand and produce language.

In addition to their beneficial functions, collocations seem problematic when being produced especially by foreign language learners. They consist of at least two words, one pivot –node– word and the collocate(s) used with it; however, they have an arbitrary nature. It is difficult to translate them word by word from one language to another (Smadja, 1993). Although, it is possible to express something in more than one way, some of them do not sound natural. When foreign language learners consider their native language and translate the collocation word by word, they sometimes fail to express themselves properly. Even advanced level learners have some problems producing collocations because of their arbitrary nature (Nesselhauf, 2003). Moreover, they are also recurrent (Smadja, 1993), which means that they are not exceptions; they are often repeated in a given context. It is indispensable to learn collocations since learners frequently come across them not only in written but also in spoken language. In short, it can be said that collocations are an indispensable but problematic component of a language classroom. As a result, they should get special focus, especially in a foreign language classroom.

1.2. Previous Studies

In this paper, the studies on collocations are grouped into two groups in order to investigate the results of each group analytically. The first group of studies includes the ones which focused on identifying the most frequent collocations in spoken or written corpora and contrasting the use of the collocations between a reference corpus of native speakers of English and a learners' corpus (Laufer & Waldman, 2011; Macis & Schmitt, 2017; Shin, 2007; Shin & Nation, 2008). In other words, the first group of studies does not aim to teach the collocations, they are just descriptive or based on error analysis. Their aim is to provide implications for teaching or learning collocations. On the other hand, the second group of studies is the ones that try to investigate the effects of different methods or tools for teaching/learning collocations (Boers, Demecheleer, Coxhead, & Webb, 2014; Chan & Liou, 2005; Kasahara, 2010, 2011; Laufer, 2011; Laufer & Girsai, 2008; Peters, 2014; Sun & Wang, 2003; Webb & Kagimoto, 2009, 2011). They aimed to see the effect of the use of corpus tools (Sun & Wang, 2003; Chan & Liou, 2005), dictionaries (Laufer, 2011), matching exercises (Boers et al, 2014), meaning-focused instruction (Laufer & Girsai, 2008), and receptive and productive tasks (Webb & Kagimoto, 2009) in teaching collocations (Pellicer-Sánchez, 2015). In addition to these features, Peters (2014) and Kasahara (2010, 2011) compared the acquisition of single words and collocations.

Shin (2007) aimed to find the most frequent and grammatically well-formed English collocations by examining both a spoken and a written corpus. He found that in the most frequent fifty items in each corpus, only fifteen took place in both lists. More than sixty of the most frequent collocations were among the top 1000 words of English. In addition to these, he also found that the most frequent fifty collocations in

spoken English were more frequently used than the written collocations. As an implication, he emphasized the importance of teaching the most frequent spoken collocations in class as it is impossible to teach all the collocations in the limited time of instruction.

In another study, Shin and Nation (2008) tried to identify the most frequent collocations in spoken English and they based their study on the spoken section of British National Corpus. They applied a set of criteria for finding collocations to be taught in a beginner level spoken course. They found a large number of grammatically well-formed high frequency collocations. They also found that if the pivot word's frequency is high, the number of its collocations were high as well. Moreover, they realized that shorter collocations had the higher frequency. As a result of their study, they provided a list of top one hundred collocations in spoken English.

Laufer and Waldman (2011) investigated how native speakers of Hebrew used the verb-noun collocations in writing at three proficiency levels. They compiled a learner corpus and compared it with Louvain Corpus of Native English Essays (LOCNESS). They identified 220 most frequent nouns, occurring 20 or more times in LOCNESS and created concordances for the nouns and chose verb-noun collocations among them. First, they compared the frequency of collocation use between the participants and the native speakers. Then, they compared participants from different proficiency groups in terms of frequency and accuracy of collocations. They found that native speakers produced more collocations than all the participants at different proficiency levels. In addition, it was found that only at the advanced level, the number of collocations increased. However, errors were persistent even at the advanced level.

In a very recent corpus-based study, Macis and Schmitt (2017) investigated the types of 54 collocations from the Corpus of Contemporary American English; whether they are literal, figurative or duplex collocations. They described literal collocations as “combinations where the literal meanings of the words are simply added together”; figurative collocations as the ones which “have idiomatic meanings which are not derivable from the component words” and duplex collocations as the ones that both have a literal and figurative meaning (p. 50). They found that although most of the collocations seemed literal, an important percentage of them had both literal and figurative meaning, and relatively a few of them had only figurative meaning. As a result, they suggest addressing types of collocations differently by considering whether the receptive or productive knowledge of a collocation is required.

As mentioned before, the second group of the studies focused on teaching/learning of collocations. Chan and Liou (2005) investigated the use of Web-based practice units with an online Chinese-English bilingual concordance for learning English verb-noun collocations. Thirty-two Chinese college EFL students participated in the study. Of the five Web-based practice units used in the study, three included the use of concordancer. The results of the study showed the effectiveness of explicit online instruction in improving the knowledge of collocations in the immediate post-test. The results were significantly higher for the units with a concordancer. It was also found

that different verb-noun collocations resulted in different practice effects. As far as the practice effects were concerned, different prior collocation knowledge was also found to be effective in performance differences.

In another study, Laufer (2011) searched for the effect of dictionary use in teaching collocations. She gave the intermediate level participants a set of sentences containing verb-noun collocations. The verbs of these collocations were missing and the participants were asked to fill in the missing verbs by using their dictionaries. It was found in the study that collocational knowledge of the participants significantly increased with the use of a dictionary. However, Laufer (2011) also reached the conclusion that sometimes the participants found the wrong collocations and other times they could not realize that the collocation was unfamiliar to them and did not consult to their dictionaries. As a result, Laufer concluded that by focusing on words in instruction, teachers should supplement the awareness of collocations.

In a Turkish EFL context, Çelik (2011) aimed to search for the effects of web-based concordancing activities and online dictionary use on EFL learners' collocational competence. The first experimental group studied words and prepositional phrases through concordance and corpora based activities and the second experimental group used an online dictionary to acquire them. The instruction was given through a learning management system (MOODLE). Although there were significant differences between the pre and post-test results of the two groups, the study did not reveal any significant difference between the groups. However, delayed post-test results showed that the corpora-based learning group had a higher level of retention. Çelik (2011) suggested implementing a data-driven learning approach into intensive English language programs in order to focus on lexical and collocational competence.

Boers et al (2014) also conducted a study to see the effects of different types of exercises on learning collocations. They compared the effectiveness of three verb-noun matching exercises. These exercises included connecting the verb and the noun, inserting the verb and underlining the verb with the activities in which the verb-noun collocation was given together and the participants were expected to insert the whole collocation. The results of the study reported that there was not a significant difference between the two types of exercises and pre-and post-test results showed little gains for all types of exercises in knowledge of collocations. Although they did not reach any significant difference between giving the collocation intact or separately, they give a preliminary conclusion that most effective option of studying collocations is probably supplying the collocations intact in the given worksheets.

Laufer and Girsai (2008) compared the effect of explicit contrastive analysis and translation activities on the acquisition of single words and collocations. There were three instruction groups in the study. The first one was the meaning focused instruction group and they dealt with content-oriented tasks. These tasks did not require giving attention to the target words and collocations. The second one was the non-contrastive form-focused group in which they used text-based vocabulary tasks and these tasks focused on the target items. The last one was a contrastive analysis

and translation group in which they had text-based translation tasks. A contrastive analysis of the target items and their L1 translation options were provided by the teacher in the correction stage for the last group. The results of the study showed that the meaning focused instruction group learned almost none of the target items whereas the other two groups achieved the acquisition of collocations. It should also be mentioned that the contrastive analysis and translation group outperformed the others in all tests.

Webb and Kagimoto (2011) aimed to investigate the effects of three factors on Japanese EFL learners' learning of collocations; the number of collocates per node word (6, 3 or 1), position of the node word and synonymy. The results of the study revealed that Japanese EFL learners learned more collocations as the number of collocates per node word increased. In addition, their learning of collocations was not affected by the position of the node word. However, synonymy affected their learning negatively.

Peters (2014) and Kasahara (2011) compared the acquisition of single words and collocations. Peters (2014) found that for making an initial form-meaning connection, explicit activities on verb-noun collocations were effective. However, single words were remembered better than the collocations and it suggested that learning single words was easier than learning collocations. On the other hand, Kasahara (2011) examined the single words and collocations paying attention to known and unknown words and combinations. He used the combination of one known and one unknown words in collocations and compared them with single unknown words. There were two groups of participants. One group was asked to remember 20 collocations and the other group 20 single words. The results of the immediate and delayed post-tests showed that the group that studied collocations had a better retention rate and retrieval of the meanings than the single words group.

All of these studies provide valuable implications for language teachers and learners. However, none of them specified the types of the tasks used to teach collocations as receptive or productive. Also, they did not clearly indicate whether the tests aimed to assess receptive or productive knowledge of collocations. In addition to these, they also did not focus on the relationship between meaning and collocation. All these points were given attention in a study conducted by Webb and Kagimoto (2009). They aimed to find out to what extent receptive and productive tasks were effective for explicitly teaching collocations in the language classroom, how these tasks influence learning gains in receptive and productive knowledge of collocation and meaning and what the results showed about the nature of the relationship between collocation and meaning. To find answers to those questions, they worked with 145 Japanese EFL learners at the university level. Twenty-four verb-noun collocations were chosen and four different types of tests were designed; receptive and productive collocation tests and receptive and productive meaning tests. The receptive collocation test was also used as the pre-test. The results of the study revealed that for both the receptive and productive treatment groups, there was a significant difference between the pre and post-tests of receptive collocations. However, there was not a significant

difference between the receptive and productive tasks on any of the individual tests. They also found that the learners with higher proficiency level were significantly better at productive tests and, lower level participants were better at receptive tests.

Inspired by the study of Webb and Kagimoto (2009), the present study also aimed to find out the effectiveness of receptive and productive tasks on receptive and productive knowledge of collocation and meaning. The same study design was also used in the present study, it can be said that it is a partial replication of their study. The same number of target words was not used in the present study because of time limitation and the participants were not divided as higher or lower level because they were all at the same proficiency level. With the mentioned differences in the design, the present study also tried to answer the following research questions:

1. To what extent are receptive and productive tasks effective tools for teaching collocations explicitly in an EFL classroom?
2. In what ways do receptive and productive learning conditions influence learning gains in receptive and productive knowledge of collocation and meaning?
3. What do the results show us about the nature of the relationship between collocation and meaning?

2. Method

2.1. Participants and Setting

The study was conducted in an EFL setting, at the Faculty of Engineering at Ömer Halisdemir University, in Niğde, Turkey, where university students had studied English for general purposes during a complete academic year before they started their university education at their departments. They were first-year students from the Electrical and Electronics and Mechanical Engineering departments. 134 undergraduate students participated in the study, 46 of them were assigned to the receptive treatment group, 42 of them to the productive treatment group and 46 to the control group. Their ages ranged from 19 to 22, but most of them were 19 or 20. None of the participants lived in an English-speaking country. They were at the low intermediate level when they participated in the study.

2.2. Design of the study

Two weeks before the treatments, the pre-test was administered to all of the participants. To complete the pre-test, the participants were given as much time as they needed. Then, they were randomly assigned to the receptive and productive treatment groups and the control group. Although the participants in Webb and Kagimoto's study (2009) were assigned to groups according to the results of the pre-test, that was not the case in the present study. As all the participants were at the same language proficiency and the study did not focus on proficiency level differences, they were randomly assigned to the groups. In the receptive treatment, 46 participants read the target collocations in three glossed sentences. In the productive

treatment, 42 participants were given two target collocations with two groups of three glossed sentences. However, in these six sentences the target collocations were not given and the participants were asked to write the target collocations in the blanks. The glossed sentences were the same that were given to the receptive treatment group. The control group just completed the receptive collocation test which was administered as a post-test.

The participants were given as much time as they needed to complete the treatments and the tests. It took 90 minutes to complete the experiment. The participants did not know that they were going to be tested before the treatment. To make sure that they all took part in the treatment, they were monitored. The post-tests were administered immediately after the treatments. There were four post-tests; the receptive collocation test, the productive collocation test, the receptive meaning test and the productive meaning test.

2.2.1. Target collocations

20 collocations were used in the study. The node word in each of these 20 collocations was a verb followed by a noun as its collocate. Webb and Kagimoto (2009) reported that they used verb-noun collocations in their study because verb-noun collocations were found to be problematic for EFL learners. All of the words that made up of the collocations were high-frequency words and the participants were likely to know them.

2.2.2. Treatments

In the receptive treatment, the participants were given the target collocation and its Turkish meaning followed by three sentences. They were expected to read and understand the target collocations in the given sentences. All of the 20 target collocations were given in this way; in total there were 20 target words used in 60 sentences. The target collocations were bold-faced for grabbing the attention of the participants.

In the productive treatment, the same sentences were given as in the receptive treatment. However, the target collocations were given in blanks to this group. Two groups of three sentences with blanks were given and the participants were expected to decide which of the given two collocations were used in which group of three sentences. After they completed the cloze task, the answer key was shown to the participants in order to avoid mismatches. However, the correct answers were not explained in context.

It should be noted that these sentences used in the treatments were taken from the original study, but some of them were changed in order to make them understandable for the participants of this study.

2.2.3. Dependent Measures

To measure receptive knowledge of collocation, a pre-test was administered to choose the collocations to be used in the study. In the present study, the 24

collocations used in Webb and Kagimoto's study (2009) were given as a pre-test. No more collocations were added because of time constraints. However, four of them were excluded as they were known by more than half of the participants according to the results of the pre-test. The pre-test was a multiple-choice format test. The node word, the verb of each collocation was given and its noun collocates were asked with four options. I don't know was also given as the fifth option and the participants were asked to choose it if they were unsure. As it was done by Webb and Kagimoto (2009), in this study the distractors were among the 2000 most frequent words and were familiar to the participants.

Four post-tests were administered after the treatments. They were receptive knowledge of collocation, productive knowledge of collocation, receptive knowledge of meaning and productive knowledge of meaning tests. For calculating the productive knowledge of collocation and meaning tests, two scoring systems were used. The first one was sensitive — partial knowledge of collocation and meaning was accepted as correct and the second one was strict — only the full knowledge of collocation and meaning was accepted as correct.

The first test aimed to assess the participants' productive knowledge of collocations and in this test the node word of the collocation was given and the participants were asked to write the collocates of the given node.

In the sensitive scoring system, mistakes of spelling that resembled the target collocates, plurality or singularity and wrong part of speech were marked as correct since they reflect the partial knowledge of the word. However, they were marked incorrect in the strict scoring system.

The second test measured the receptive knowledge of collocations and was a multiple-choice test. It was the same test that was given as the pre-test and the number of collocations was reduced to 20 according to the results of the pre-test.

The aim of the third test was to assess the productive knowledge of meaning and it was a translation test. The participants were given the Turkish equivalent of the target collocation and asked to write the corresponding English collocation. As it was done for the productive knowledge of collocation test, two scoring systems were also used in this test. In the sensitive scoring system, collocates with spelling mistakes were scored correct if the given answer clearly resembled the target collocation.

The fourth test aimed to assess receptive knowledge of meaning and was also a translation test. In this test, the target collocations were given and the participants were asked to write the Turkish equivalent of each collocation.

The order of the collocations was changed in all of the tests to reduce the learning effect. Before handing in the next test, the previous one was collected in order to avoid making use of the other tests.

3. Results

The first research question aimed to find the effectiveness of using receptive and productive tasks for teaching collocations explicitly in the classroom by taking participants' pretest and posttest results of the receptive collocation test. As it can be seen in Table 1, descriptive statistics results indicated that after the treatment, the mean score of the receptive task group increased from 2.04 (*SD* = 1.03) to 14.56 (*SD* = 4.80). The mean score of the productive task group also changed in a positive way after the treatment; it increased from 1.73 (*SD* = 1.66) to 12.19 (*SD* = 3.59). As was expected, the mean score of the control group did not change like the groups under treatment. The mean score was 2.73 (*SD* = 1.55) in the pretest and 3.45 (*SD* = 1.68) in the posttest. In order to determine the effects of the learning conditions (receptive and productive tasks) the same analyses in Webb and Kagimoto's study (2009) were employed. Welch's robust test for differences in group means was conducted with the changing scores (post-pre score) on tests measuring receptive knowledge of collocation for the receptive, productive task groups and for control group. Welch's robust test was used instead of an ANOVA test because Levene's test of homogeneity results rejected the assumption of equal variances (Welch, 1951).

Table 1. Descriptive Statistics of Pre and Post Receptive Collocation Tests

Tests	Learning Condition								
	Receptive Task Group			Productive Task Group			Control Group		
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N</i>	<i>Mean</i>	<i>SD</i>
Pretest of Receptive Collocation	46	2.04	1.03	42	1.73	1.66	46	2.73	1.55
	46	14.56*	4.80	42	12.19*	3.59	46	3.45	1.68
Posttest of Receptive Collocation									

* Significant difference between pre and post-test scores ($p < 0.05$)

The results of the Welch test revealed that there were differences between the three groups in terms of improvement $F(2, 60.91) = 337.35, p = .000$. Post-hoc analyses with Tukey multiple-comparison test were conducted to see the between groups differences. It was found that the receptive ($M = 12.52, SD = 4.33$) and productive ($M = 10.45, SD = 3.20$) task groups improved their scores significantly more than the control group ($M = 0.71, SD = 0.68$) ($p < 0.05$). This meant that both the receptive and the productive tasks were effective for learning collocations receptively. The difference between the receptive and the productive task groups was also statistically significant, Receptive > Productive, $p < 0.01$. This indicated that the receptive task was more effective than the productive task. For the control group, the difference between the pretest and the posttest was not significant ($p > 0.05$). The pre and post test score differences for all the groups can be seen in Figure 1.

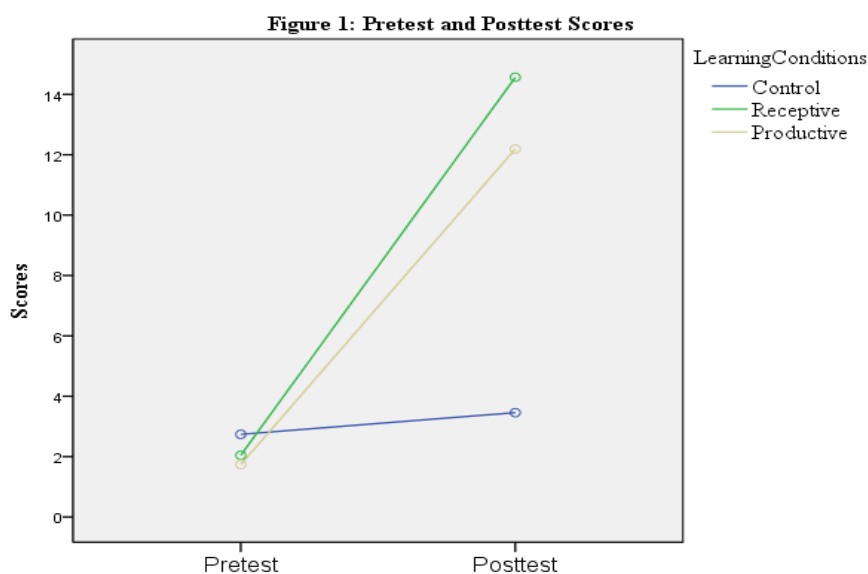


Figure 1. Pre-test and Post-test Scores

Descriptive statistics for all the dependent measures of the study (pretest and posttest of receptive collocation, productive collocation, receptive meaning and productive meaning) are all presented in Table 2. For the productive collocation and meaning tests, both the sensitive and strict scoring results were calculated. The results show that both the receptive and productive tasks helped participants to make large gains in knowledge. The difference between the two learning conditions was very little and was in favor of receptive task group. A one-way between-groups multivariate analysis of variance (MANOVA) was performed to investigate learning condition differences in collocation and meaning knowledge. In addition to the five dependent variables, the strict and sensitive scoring results for productive tests were also used as indicated before. The dependent variable was learning conditions, receptive tasks and productive tasks. Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity, with no serious violations noted. The results showed that there was not a statistically significant difference between the receptive and productive task groups on the combined dependent variables: $F(3, 84) = 1.79$, $p > .05$ Wilk's Lambda=.86. As the model did not show any statistically significant difference between the groups, no further analysis was carried out.

Table 2. Descriptive Statistics of the Dependent Measures for Learning Conditions

Tests	Learning Condition			
	Receptive Task Group (<i>N</i> = 46)		Productive Task Group (<i>N</i> = 42)	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
Pretest of Receptive Collocation	2.04	1.03	1.73	1.66
Productive Collocation (Sensitive Scoring)	9.55	4.82	8.00	3.42
Productive Collocation (Strict Scoring)	8.70	4.38	7.28	2.90
Posttest of Receptive Collocation	14.56	4.80	12.19	3.59
Productive Meaning (Sensitive Scoring)	9.75	4.52	8.16	3.17
Productive Meaning (Strict Scoring)	8.75	4.48	7.14	2.92
Receptive Meaning	14.64	3.89	12.11	2.58

4. Discussion

It was found in the present study that both receptive and productive tasks – reading three glossed sentences for each collocation and completing a cloze task – were effective for learning collocations receptively. Mean scores of the receptive knowledge of collocations increased from 2.04 on the pre-test to 14.56 on the post-test. The results also increased for the productive task group from 1.73 on the pre-test to 12.19 on the post-test. This shows that the receptive task group increased their receptive collocation knowledge from 10% to 73% while that of the productive task group increased from 9% to 61%. When the percentages of learning gains are taken into consideration, it can clearly be seen that the receptive task group performed better than the productive task group on the post-test, but the difference was not significant. The scores of the receptive task group were also better than the productive task group on the productive knowledge of collocation task. They were able to write 48% of the collocates of the given node words correctly in the sensitive scoring system and 44% in the strict scoring system. On the other hand, the participants in the productive task group wrote 40% of them correctly in the sensitive scoring system and 36% in the strict scoring system. The ratio of the difference between the strict and sensitive scoring systems was equal for both of the groups. It was not surprising to find that the scores on the receptive tests were higher than those on the productive tests. It was also supported by previous studies that receptive knowledge is gained more than productive knowledge (Waring, 1997a; Webb, 2008; Webb & Kagimoto, 2009).

When the results of both the receptive and productive tests are considered, it can also be said that both receptive and productive tasks are effective methods of teaching collocations explicitly in the classroom. The results support the previous studies in which some methods like web-based practice units and concordances (Chan & Liou, 2005; Çelik, 2011), the use of dictionaries (Laufer, 2011), text-based vocabulary and

translation tasks (Laufer and Girsai, 2008) and receptive and productive tasks (Webb & Kagimoto, 2009) were found to be effective tools for teaching collocations.

This study also aimed to investigate the relative effectiveness of receptive and productive tasks. As stated by Webb and Kagimoto (2009), earlier vocabulary acquisition studies reveal that productive learning activities tend to be more effective than receptive activities at increasing productive knowledge of meaning. Conversely, receptive activities are more effective than productive activities at increasing receptive knowledge of meaning (Griffin & Harley, 1996; Stoddard, 1929; Waring, 1997b). Although, the mean scores of the receptive task group were higher on the receptive knowledge of collocation and meaning tests than those of productive tests, in line with the results of the previous vocabulary studies, it was not the case for the productive task group. Their mean scores on the productive knowledge of collocation and meaning tests were lower than their mean scores on the receptive knowledge tests. Webb and Kagimoto (2009) also found little difference between the effects of receptive and productive tasks on knowledge of collocation and meaning. They stated that this little difference may be because of productive test's not being so demanding. However, when they grouped their participants as lower and higher level learners, they found that higher level learners who had productive tasks as treatment had significantly higher scores on all of the post-tests, except for receptive knowledge of meaning. On the other hand, lower level learners who had receptive tasks as treatment had significantly higher scores on all of the post-tests, except for receptive knowledge of collocation.

In this study, the participants were not divided into groups as higher and lower level learners because they all had a similar language proficiency level. It can be said that they were all lower level learners. When the results of the present study and Webb and Kagimoto's (2009) study are compared, it can be stated that they have similar results. As the participants of this study were lower level learners, the receptive task group had higher scores on all of the post-tests than the productive task group. First of all, the demanding nature of the productive task may have caused difficulty for the lower level participants. While trying to find which collocation was used in the given sentence, they may have just focused on completing the activity and may have not focused on the collocation and its meaning specifically. As they were given two collocations and their glossed sentences together, they may have learnt those collocations in pairs. When all of the collocations were given together in the post-tests, participants could not have discriminated their meanings because of their limited language proficiency. Second, because of the increased learning burden of the productive task, they may have spent less time on the L2 form, compared with the ones in the receptive treatment group.

The last research question aimed to investigate the relationship between collocations and meaning. As pointed out by Webb and Kagimoto (2009), there was a valid comparison between collocations and meaning on productive tests because, these tests had a similar format and they were not likely to be affected by any of the other tests. However, because of their different format (one was a multiple-choice test and

the other was a translation test) the receptive knowledge of collocations and meaning tests may not have an accurate comparison. They found that the mean scores of both groups on the productive knowledge of meaning test were slightly higher than the scores on the productive knowledge of collocation test. However, in this study the mean scores of both receptive and productive task groups on the productive meaning and collocation tests were nearly the same. The mean scores of all participants on the productive knowledge of collocation test were 7.99 using the strict scoring system and 8.77 using the sensitive scoring system. This means that all of the participants knew 40% of the collocations productively according to the results of the strict scoring system. This rate increased to 44% in the sensitive scoring system. The mean scores of all participants on the productive knowledge of meaning test were 8.95 and 7.94, using the sensitive and strict scoring systems respectively. This indicates that the participants knew 40-45% of the meaning of collocations productively. As it can clearly be seen, the rates of productive knowledge of meaning and collocation were nearly the same in this study. This may have resulted from the treatment stage. As the collocations were encountered with their L1 meanings in the treatment and lower level learners pay great attention to the L1 meanings of vocabulary items, they could remember them as well as the collocation itself.

5. Conclusions

The present study investigated the effects of receptive and productive tasks on learning collocations and meaning. The participants in the receptive task group read three glossed sentences for each of the 20 verb-noun collocations. Also, the participants in the productive task group read the same glossed sentences but, in these sentences the collocations were not given. They read the sentences and filled in the blanks with the given collocations. The results showed that learners in both receptive and productive task groups were able to get receptive knowledge of the given collocation and meaning for about 13 of the 20 target collocations. On the other hand, they were able to gain productive knowledge of collocation and meaning for approximately 8 of the target collocations. However, there was not a statistically significant difference between the receptive and productive task groups on any of the tests.

The results reveal that both receptive and productive tasks can lead to learning gains in knowledge of collocation and meaning. The findings of the study also indicated that lower level learners were not able to benefit from productive tasks as effectively as receptive tasks. This was supported by Webb and Kagimoto's study (2009). Further research comparing higher and lower level learners' achievement on different kinds of receptive and productive tasks would be helpful to reach a conclusion in terms of the relationship between learners at different proficiency levels and the effect of receptive and productive collocation tasks.

6. Teaching Implications

As the results of the study show, receptive and productive tasks, like reading glossed sentences and cloze tasks, can be used for teaching collocations. However, there are some points to give attention to. First of all, it should not be forgotten to give importance to noticing. Learners should be made aware of the fact that knowing the meaning of the single words is not enough for knowing the meaning of collocations. From the beginning level, students should notice that they should also specifically focus on collocations. Teachers should also allocate time for teaching them explicitly in the classroom. Secondly, students should also notice that there are differences between languages in terms of using two words together. In order to avoid L1 interference, students should be taught to consult dictionaries or concordancers to check the meaning of collocations. They should not try to use them in the way they do it in their native language. Thirdly, as the results of the study indicate, the level of the students should be kept in mind while designing receptive or productive activities for teaching collocations. In this study, as the level of the students was not high, they could not benefit from the productive task as effectively as they benefited from the receptive task. To increase the learning gains, teachers can start with the receptive tasks for teaching collocations at lower levels and try to make students learn them productively with repetition, instead of starting to teach them with productive tasks at the beginning.

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