No Negotiation, Limited Negotiation, and Extended Negotiation in Proactive Focus on Form in Vocabulary Acquisition

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ABSTRACT

Negotiation, as an interactional strategy and proactive focus on form (FoF) have received increased attention in second language research. The combination of negotiation and proactive FoF, however, has not been examined in relation to L2 vocabulary learning. To address this gap, the present study investigated how the amount of negotiation and proactive FoF impacted learners' vocabulary knowledge development. The participants were 100 adult learners of English, assigned to three experimental groups and one control group. The three experimental groups investigated three categories of no negotiation, limited negotiation, and extended negotiation in proactive FoF. A pretest-posttest design was employed in order to detect any improvement in participants' vocabulary knowledge components, consisting of collocations, synonyms, derivation, and hyponymy. The results revealed that (a) participants' vocabulary knowledge significantly improved in all the experimental groups, (b) extended negotiation was significantly superior to limited negotiation, and limited negotiation was significantly superior to no negotiation in proactive FoF, and (c) derivation was the least affected vocabulary component by the treatment.

Keywords: collocations, derivation, hyponymy, negotiation, proactive focus on form, synonyms, vocabulary components

Introduction

The key concept of negotiation, that is, the interactional strategies used to reach a solution to a problem in the course of communication, has been widely recognized as a determining factor in promoting language teaching. Scrutinizing this idea from different perspectives, Nassaji (2007) asserts there are many theoretical reasons why negotiation is helpful. From the input-output perspective, negotiation provides opportunities for comprehensible input and pushed output which have been shown to improve L2 accuracy. Furthermore, from a sociocultural perspective, negotiated feedback is a powerful feedback as it provides opportunities for scaffolding, that is, the supportive conditions created through social interaction. In addition, negotiation provides the learner with more time to attend to the error and process the feedback (p. 128).

Considering this issue from another perspective, Ellis (2008) postulates that negotiation facilitates attention to form, and, as a result, it facilitates acquisition because it connects input, internal learner capacities, and output in productive ways. Although the role of negotiation in language teaching process has been emphasized, the degree of negotiation can be subject to research. Nassaji (2007) divides this issue into three forms of no negotiation, limited negotiation, and extended negotiation. Furthermore, he explains that no negotiation exists when there is no elicitation-response between the teacher and the student. However, when there is just one elicitation-response between the teacher and the student, limited negotiation occurs. And, finally, when there is more than one elicitation-response, there will be extended negotiation in the teaching process.

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The importance of the concept of negotiation is highlighted as a result of the emergence of form-focused instruction (FFI). The idea of focus on form (FoF) was first introduced by Long (1991). In a seminal work, Long maintains, "FoF overtly draws students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication" (p. 41). Long, then, asserts that when classroom second language learning (SLL) is entirely experiential and meaning-focused, some linguistic features do not ultimately develop to target-like levels. On the basis of this proposal, a strong claim has been made that FoF may be necessary to push learners beyond communicatively effective language towards target-like second language ability. Therefore, the time has come to study the role of FoF in second language acquisition (SLA).

Regarding the sub-categories of FFI, Andringa (2005) points out that although the majority of FFI studies have focused on the domain of grammar, the term *form* actually refers to all formal aspects of language, to grammar, but also to pronunciation, spelling, intonation, vocabulary, etc. Hence, one of the subcategories of form is vocabulary which is the subject of the present research.

Gaining vocabulary knowledge as an important skill in SLA has been discussed extensively in the literature. Laufer (1997) asserts that no text comprehension is possible; either in one's native language or in a foreign language, without understanding the text's vocabulary, and vocabulary knowledge plays a significant role in text comprehension. On the other hand, lexical acquisition itself is indeed a very complex issue (Nation, 2002), and it cannot be assumed that acquisition of a word's basic meaning will imply acquisition of formal aspects of the words. Therefore, acquiring vocabulary knowledge is more than getting access to the meaning of words, and all components of vocabulary knowledge must be considered in this regard.

The importance of FFI can be highlighted when learners direct their attention to language items and gain knowledge through focusing their attention on the form of those items. One of the language components which needs to be focused on is vocabulary. Regarding learning vocabulary, Nation (2002) asserts that negotiation of vocabulary is a kind of language-focused instruction. Since all the usages of vocabulary cannot usually be learned individually by the learner, the negotiation in the classroom regarding the usage of vocabulary can be an essential issue for research. As Cook (2001) maintains, it is unlikely that everything about a word is learned individually by the learner. In fact, classroom negotiation can assist language learners a lot to overcome the barriers they encounter, such as in vocabulary learning.

Considering the basic tenets of progressivism (Clark, 1987) which emphasizes the role of learners as active participants in the teaching process, and with reference to the importance of negotiation and form-focused instruction (FFI) in the language teaching process, it is of great importance to include negotiation and FFI in the EFL classes when teaching vocabulary. EFL learners usually learn vocabulary through different methods, most of which do not include as much negotiation as possible, and the amount of this negotiation is not predetermined in the literature. In other words, vocabulary is learned mostly through a teacher-centered approach where students do not gain much practical experience through the learning process.

The dual purpose of the present study, therefore, was firstly to include three forms of negotiation into an FFI--no negotiation, limited negotiation, and extended negotiation--and secondly to investigate the three amounts of negotiation in two different FFIs--proactive and reactive FoF. As a result, the researchers would evaluate the results of this study in the improvement of EFL learners in learning vocabulary components.

In the present study, the researchers have tried to find those components of vocabulary that have proved to be difficult for language learners. Among these vocabulary components, collocations play a significant role in language learning. Richards and Rodgers (2001) elaborate on this issue by saying that multiword units, functioning as chunks or memorized patterns, form a high proportion of the fluent stretches of speech, and the role of collocation is important in lexically-based theories of language. Furthermore, Coady (1997) asserts that collocations are not learned well through ordinary language experience and present a major problem in the production of correct English, and there is a need for them to be learned explicitly.

Except collocations, there are other subcategories of vocabulary that should be investigated. Reppen and Simpson (2002) maintain that learners

have problems with synonymous words, and they do not sometimes know their actual use and functions. Besides, most dictionaries do not provide clues in knowing how synonymous words differ in meaning. In order to emphasize the role of synonyms, Harmer (2001) states that although it is difficult to find real synonyms, the context in which the words are used is a determining factor in assigning synonyms, and learning the words which mean nearly the same to each other is a significant way to gain vocabulary knowledge. Another vocabulary subcategory which needs investigation is word derivation. Learning derivation can be beneficial for learners since they become conscious of the meanings of the roots of words, and it can be facilitating for keeping a word in one's mind (Hadley, 2003). According to Zimmerman (1997), the ability to use derivation is one way of discovering the basic meaning of a word.

Finally, hyponymy is the fourth vocabulary component under investigation in this study. Arnaud and Savignon (1997) maintain that hyponymy refers to the way a word fits into its vocabulary hierarchy, and it can be of great importance when it comes to the acquisition of vocabulary knowledge. When part of a word's meaning concerns its relations with other words in terms of how it fits into the vocabulary hierarchy, hyponymy can play a key role in increasing the information that a learner needs to possess. For instance, the learner needs to know that the words "lay off", "dismiss", and "fire" refer to the situation of "losing one's job", but the word "arrest" does not belong to this category.

On the whole, these four vocabulary components can be studied under the category of negotiation in proactive FoF. In other words, in the proactive phase of the study, the researcher preplans for the FoF, and planning beforehand makes proactive FoF possible. Considering the fact that the subjects speak the same first language, it would be possible to preplan in advance for the proactive FoF.

Research Questions

Considering the points about the significance of an investigation on the degree of negotiation in proactive FoF and its contribution to vocabulary learning, the following research questions are raised:

1. Does no negotiation in proactive FoF (NNP) result in an improvement in vocabulary learning?

2. Does limited negotiation in proactive FoF (LNP) result in an improvement in vocabulary learning?

3. Does extended negotiation in proactive FoF (ENP) result in an improvement in vocabulary learning?

4. Does the amount of negotiation in proactive FoF result in a differential improvement in vocabulary learning?

Null Hypotheses

Based on the above research questions, the following null hypotheses are raised:

1. No negotiation in proactive FoF (NNP) does not result in an improvement in vocabulary learning.

2. Limited negotiation in proactive FoF (LNP) does not result in an improvement in vocabulary learning.

3. Extended negotiation in proactive FoF (ENP) does not result in an improvement in vocabulary learning.

4. The amount of negotiation in proactive FoF does not result in a differential improvement in vocabulary learning.

Methodology

Participants

In this study, three major degrees of negotiation consisting of no negotiation, limited negotiation, and extended negotiation were investigated. Each negotiation type was accompanied by proactive FoF. As a result of these investigations, there were three experimental groups, as well as one control group, consisting of 100 subjects who were divided into four intact groups of 25 subjects. It should be noted that the subjects of the present study were freshmen students of English translation studying at three branches of Islamic Azad University. The four groups of the subjects are described as follows:

Group 1: Subjects experiencing no negotiation in proactive FoF (NNP)

Group 2: Subjects experiencing limited negotiation in proactive FoF (LNP)

Group 3: Subjects experiencing extended negotiation in proactive FoF (ENP)

Group 4: Subjects experiencing no negotiation and no FoF (control group)

In the four groups mentioned above, the first three groups made up the experimental groups, while the fourth group was regarded as the con-

trol group. The subjects of this study were both male and female students who studied English majors at the university.

Instrumentation

The present study entailed the use of four instruments, which were intended to homogenize the subjects, estimate the range of their vocabulary knowledge, expose them to a contextualized vocabulary instruction, and compare their vocabulary knowledge before and after the treatment. These instruments included Comprehensive English Language Test (CELT), The Vocabulary Levels Test (VLT), Vocabulary pre-test and post-test, and the target words that the learners were not familiar with.

Comprehensive English Language Test (CELT)

CELT is a well-established comprehensive English language test suitable for college students. It has earned an excellent reputation as a valid and reliable instrument for measuring English language proficiency level. The test was taken from an original book called CELT (Payne Harris & Palmer, 1986). In order to ensure that the test was reliable, the researcher had a pilot study in which 15 students took the test, and the reliability of the test which was calculated through Cronbach alpha proved to be .87.

The Vocabulary Levels Test (VLT)

VLT is the second version of the test revised and validated by Schmitt et al. (2001). Originally developed by Nation (1983) and later revised by him in 1990, the test provides an estimate of vocabulary size at 2000, 3000, 5000, and 10000 frequency levels, meanwhile giving an estimate of the test-takers' vocabulary size. The items of the test are de-contextualized so that no clues are provided to their meanings. Schmitt et al. (2001) established item discrimination, item facility, reliability, and validity of the test.

Vocabulary Pre-Test and Post-Test

In order to assess the students' vocabulary knowledge before the treatment and evaluate the effect of the degree of negotiation in proactive FFI, a vocabulary test was prepared by the researchers. The words used in this test were randomly selected from the new vocabulary of the learners' textbooks. The test included 160 multiple-choice items consisting of four sections with 40 items in each section. The sections of the test

included synonyms, collocations, derivation, and hyponymy, respectively. The construct validity of the test was determined through principal component and a subsequent factor analysis. Regarding the reliability of the test, the researchers had two pilot studies, which revealed that the test was reliable. The researchers found the reliability of the test as much as 0.895.

Target Words

The target words, i.e., the words the researchers decided to teach, were selected from the currently-used authentic materials. They were, in fact, selected randomly from the new vocabulary of a number of reading passages that the university students were generally exposed to. Moreover, since the words needed to lend themselves to the four vocabulary components of this study, the researchers selected the words based on this possibility.

Procedure

The present study consisted of eight phases. In the first three phases of the study, three pre-tests were administered, while in the next four phases the treatment took place, followed by the last stage in which the post-test was administered. It must be mentioned that the research took place in a university semester consisting of three sessions for the pre-tests, ten sessions for the treatment, and one session for the post-test. The treatment took 45 minutes of each session, and the number of vocabulary items taught in each session was 16. As a result, at the end of the semester, the 160 words taught were subject to the post-test.

The first phase of the study involved selecting four intact groups of first-year students studying English translation at three different universities. One group served as the control group, and the other three were experimental groups. All four groups were given the CELT test. The mean scores of the groups were compared using the one-way ANOVA test to determine the possible homogeneity of the students' knowledge of English. In some cases there was a significant difference between the mean scores of the groups; therefore, other groups of students took the test until four homogeneous groups were found.

In the second phase, the researchers attempted to determine the vocabulary knowledge of the first-year students of translation. To do that, the researcher administered the Vocabulary Levels Test (VLT). As a result of this procedure, the

mean scores obtained by all students served as an indication of the level of the vocabulary knowledge of the students. The mean scores indicated that the learners' vocabulary knowledge was at the 3000 level, and, based on this finding, the researcher could select the appropriate words to be taught in the treatment phase. In this way, the words to be taught in the treatment phases were selected from the textbook by checking their frequency in the Collins Cobuild Dictionary.

In the third phase of the study, the participants took the pre-test which consisted of 160 vocabulary items. This test was administered in order to make sure that the students did not know the meanings of those 160 words which were going to be taught during the treatment sessions. The results indicated that the learners did not know the meanings of the target words.

The fourth phase of the study was a part of the experimental phase when the researchers started their treatment. In this phase, the first experimental group experienced no negotiation in proactive FoF. In other words, the subjects were given the vocabulary information without any further negotiation before the wrong form of the word appeared. The following example makes the treatment clear.

Teacher: In the sentence "I'd love to have a break, but I can't spare the timjust now." the word "spare" means "spend."

In this way, the learners were exposed to the synonym of the word "spare,", and then there was no further interaction between the teacher and the learners in this regard. It must be mentioned that all this process took place proactively, before the ill forms appeared.

In the fifth phase, the second experimental group experienced limited negotiation in proactive FoF; i.e., they were given the form accompanied by only one elicitation-response between the teacher and the students. In this phase, before a student made a mistake in using a word, the teacher warned the participant through a limited negotiation process. An example will make this treatment clear.

Teacher: In the sentence "A sudden rush of excitement came over me." the word "rush" means "emotion." What does "rush" mean?
Learners: It means "emotion."

The process of focusing the learners' attention on the synonym went on with other learners, and the researcher made sure that there was only one elicitation-response between the learners and the teacher.

In the sixth phase of the study, extended negotiation in proactive FoF was administered to the third experimental group. In this phase, there were more than one elicitation-response between the teacher and the students. Prior to the learners' erroneous use of a vocabulary item, the teacher negotiated the use of the word extensively through a number of elicitation-responses. The following example will clarify this phase of the study.

Teacher: In the sentence "After hours of questioning, the suspect confessed." the word "confess" means "admit." What does "confess" mean?
Learners: It means "admit."
Teacher: What did the suspect do after hours of questioning?
Learners: He confessed. In fact, he admitted his mistakes.
Teacher: Maryam, does anyone confess after hours of questioning?
Maryam: Yes, I think most people confess after hours of questioning. They admit their mistakes after long hours of questioning.

In this way, FoF was practiced, using a number of elicitation-responses between the teacher and the learner(s) in order to ensure the existence of extended negotiation in proactive FoF in teaching synonyms.

In the seventh phase of the study, the researcher provided neither negotiation nor FoF since this group was the control group. In this group, vocabulary instruction was performed based on the traditional way without any negotiation and also without any attention to form. The following example will indicate how this phase was performed.

Learner: There are too many rules and commands in this organization.
Teacher: There are too many rules and regulations in this organization.

In this way, the teacher only corrected the error by giving the right answer without focusing the student's attention on the form of the word.
The last phase was at the end of the semester when the researchers administered a vocabulary post-test, consisting of 160 items. The mean scores of the post-test in the seven groups were compared through one-way ANOVA with a post hoc using Tukey procedure. Moreover, the means of the pre

tests were compared with the means of the post-tests through Repeated Measurement with a post-hoc. In this way, the researcher determined the degrees of success in each of the four groups, and therefore, he analyzed the results.

Results

Null Hypothesis I. No negotiation in proactive FoF does not result in an improvement in vocabulary learning

In order to test Null Hypothesis I, the researchers made a comparison between the results of the pre-test and the post-test of the NNP group. Table 1 shows the descriptive statistics for the NNP group.

Reading the mean column of Table 1 reveals that the participants in the NNP group performed much better on the post-test (M = 111.40) than on the pre-test (M = 13.60), suggesting that providing the learners with NNP can help them improve their vocabulary knowledge effectively. Moreover, a paired samples t-test analysis was run whose results (Table 2) indicate that the mean difference between the pre-test and post-test is statistically significant, T (24) = 54.30, p = 0.000. Null Hypothesis I is, therefore, rejected at the 95% level of confidence.

For the purpose of finding the amount of the learners' improvement in vocabulary components, a one way ANOVA and Tukey's post hoc statistical procedures were run.

A brief review of the descriptive statistics (Table 3) indicates that the mean scores in three

components of collocations (M = 30.44), synonyms (M = 30.76), and hyponymy (M = 30.24) are close to one another, while the mean score of the component of derivation (M = 19.16) is lower. Considering the fact that the pre-test mean scores of these components did not differ significantly, the lower post-test mean score in derivation suggests that that the treatment was less effective on learning derivation in comparison with synonyms, collocations, and hyponymy.

Moreover, the significance of the differences was examined through a one way ANOVA (Table 4). As Table 4 indicates, differences between the mean scores were statistically significant, F (3) = 96.65, p = 0.000. It can, then, be concluded that the components have not been improved in the same way. In order to see where the difference between the components lie, Tukey's post hoc tests were employed. Table 5 illustrates the result of this comparison.

Based on the information presented in Table 5, the comparisons leading to the component of derivation were significant, while the comparisons which did not lead to derivation were not significant.

Null Hypothesis II. Limited negotiation in proactive FoF does not result in an improvement in vocabulary learning.

Table 1. *Descriptive Statistics of No Negotiation Proactive Group*

Group	Mean	SD	N
Pre-Test NNP	13.60	4.09	25
Post-Test NNP	111.40	9.25	25

Table 2: *Paired Samples T-Test of No Negotiation Proactive Group*

Pairs	M	SD	SEM	t	df	Sig. 2-tailed
Pair 1 NNP Pre-Test Post-Test	-97.8	9.00	1.80	-54.30	24	0

Table 3. *Descriptive Statistics of No Negotiation Proactive Group*

NNP Post-Test	N	Mean	SD	Std. Error
Collocations	25	30.44	1.93	.38
Synonyms	25	30.76	2.42	.48
Derivation	25	19.16	4.16	.832
Hyponymy	25	30.24	2.50	.50

Table 4. *ANOVA of No Negotiation Proactive Group*

NNP Post-Test	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	2406.11	3	802.03	96.65	.000
Within Groups	796.64	96	8.29		
Total	3202.75	96			

Table 5. *Multiple Comparisons of No Negotiation Proactive Group*

Dependent Variable	(I) Post-Test Vocabulary Components	(J) Post-Test Vocabulary Components	Mean Difference (I-J)	Std. Error	Sig.
NNP Post-test Tukey HDS	Collocations	Synonyms	-.32	.815	.979
		Derivation	11.28	.815	.000
		Hyponymy	.20	.815	.995
	Synonyms	Collocations	.32	.815	.979
		Derivation	11.60	.815	.000
		Hyponymy	.52	.815	.919
	Derivation	Collocations	-11.28	.815	.000
		Synonyms	-11.60	.815	.000
		Hyponymy	-11.08	.815	.000
	Hyponymy	Collocations	-.20	.815	.995
		Synonyms	-.52	.815	.919
		Derivation	11.08	.815	.000

To test Null Hypothesis II, the researcher made a comparison between the results of the pre-test and post-test scores of the LNP group. Table 6 shows the descriptive statistics related to this group.

As Table 6 shows, the post-test mean scores of the participants in the LNP group (M = 129.64) was extremely higher than the pre-test mean scores (M = 14.32). Therefore, it can be seen that the treatment in the LNP group has been quite effective. In order to evaluate the statistical significance of the difference between the pre-test and post-test mean scores, the researchers used a paired samples t-test analysis. Table 7 reveals the result of the treatment in this group.

As it is illustrated in Table 7, the mean difference between the pre-test and post-test was statistically significant, T (24) = 64.78, p = 0.000. As a result, Null Hypothesis II is rejected at the 95 % confidence level.

In order to examine the amount of improvement in the vocabulary components, the researchers used a one way ANOVA and Tukey's post hoc tests. Table 8 shows the descriptive results of this analysis.

As Table 8 illustrates, the mean scores of the three components of collocations (M = 34.76), synonyms (M = 34.76), and hyponymy (M = 33.08) were very close to one another, while the mean score of the component of derivation (M = 26.24) was lower, indicating that in comparison with the other three components, derivation has not significantly improved. For the purpose of examining whether the difference between the means of the vocabulary components was statistically significant, the researcher employed a one way ANOVA. Table 9 reveals the result of the ANOVA.

Table 6. *Descriptive Statistics of Limited Negotiation Proactive Group*

Group	Mean	SD	N
Pre-Test LNP	14.32	4.25	25
Post-Test LNP	129.64	7.28	25

Table 7: *Paired Samples T-Test of Limited Negotiation Proactive Group*

Pairs	M	SD	SEM	t	df	Sig. (2-tailed)
Pair 2 LNP Pre-Test Post-Test	-115.32	8.90	1.78	-64.78	24	0

Table 8. *Descriptive Statistics of Limited Negotiation Proactive Group*

LNP Post-Test	N	Mean	SD	Std. Error
Collocations	25	34.76	1.80	.36
Synonyms	25	34.76	2.36	.474
Derivation	25	26.24	4.32	.86
Hyponymy	25	33.08	2.25	.451

Table 9. *ANOVA of Limited Negotiation Proactive Group*

LNP Post-Test	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	1235.07	3	411.69	50.44	.000
Within Groups	783.50	96	8.16		
Total	2018.59	96			

Table 9 illustrates that the difference between the mean scores has been significant, $F(3) = 50.44$, $p = 0.000$. Therefore, the four vocabulary components have not improved in the same way. For the purpose of finding where the differences between the components exist, Tukey's post hoc tests were employed. Table 10 illustrates the result of this comparison.

Table 10 reveals that three of the comparisons leading to the component of derivation were significant, while the ones not leading to derivation were not significant.

Null Hypothesis III. Extended negotiation in proactive FoF does not result in an improvement in vocabulary learning.

Null Hypothesis III was investigated by comparing the pre-test and post-test mean scores of participants in the ENP group. For this purpose, a paired samples t-test and descriptive statistics were used. Table 11 presents the results of the descriptive statistics for this group.

As it can be seen in Table 11, the post-test mean scores of participants in the ENP group (M = 140.16) was greatly higher than their pre-test mean scores (M = 13.84). This indicates a considerable improvement in the vocabulary knowledge of the participants as a result of the treat-

ment. It was, however, necessary to examine whether this difference was statistically significant. Therefore, a paired samples t-test was used, the results of which are presented in Table 12

Findings presented in Table 12 demonstrate that the mean difference between the pre-test and post-test scores of participants in ENP group is statistically significant, $T(24) = 80.71$, $p = 0.000$. Null Hypothesis III is, therefore, rejected at the 95 % level of confidence. In order to examine whether the four components improved differently, the mean scores of the components were compared, using one way ANOVA procedures and Tukey's post hoc tests.

Table 13 indicates that the participants performed similarly in relation to collocations (M = 37.28), synonyms (M = 34.76), and hyponymy (M = 33.08), while their mean score in derivation (M = 26.24) suggested that this component was not significantly improved in comparison to collocations, synonyms, and hyponymy. The statistical significance of the difference between the means of the four vocabulary components in the ENP group was examined through a one way ANOVA. Table 14 reveals the result of the ANOVA which was run to find the differences between the components.

Table 10. *Multiple Comparisons of Limited Negotiation Proactive Group*

Dependent Variable	(I) Post-Test Vocabulary Components	(J) Post-Test Vocabulary Components	Mean Difference (I-J)	Std. Error	Sig.
LNP Post-test Tukey HDS	Collocations	Synonyms	.000	.808	1.000
		Derivation	8.52	.808	.000
		Hyponymy	1.68	.808	.167
	Synonyms	Collocations	.000	.808	1.000
		Derivation	8.52	.808	.000
		Hyponymy	1.68	.808	.167
	Derivation	Collocations	-8.52	.808	.000
		Synonyms	-8.52	.808	.000
		Hyponymy	-6.84	.808	.000
	Hyponymy	Collocations	-1.68	.808	.167
		Synonyms	-1.68	.808	.167
		Derivation	6.84	.808	.000

Table 11. *Descriptive Statistics of Extended Negotiation Proactive Group*

Group	Mean	SD	N
Pre-Test ENP	13.84	4.03	25
Post-Test ENP	140.16	6.12	25

Table 12. Paired Samples T-Test of Extended Negotiation Proactive Group

Pairs	M	SD	SEM	t	df	Sig. (2-tailed)
Pair 3 ENP Pre-Test Post-Test	-126.32	7.82	1.56	-80.71	24	0

Table 13. *Descriptive Statistics of Extended Negotiation Proactive Group*

ENP Post-Test	N	Mean	SD	Std. Error
Collocations	25	37.28	1.76	.36
Synonyms	25	34.76	2.36	.47
Derivation	25	26.24	4.32	.86
Hyponymy	25	33.08	2.25	.54

As Table 14 illustrates, the results indicate that the differences were significant, F (3) = 35.77, p = 0.000, Therefore, it could be stated that the treatment had a differential impact on these components. In order to test the significance of improvement in the vocabulary components, the mean scores of the four vocabulary components were analyzed by the use of Tukey's post hoc tests. Table 15 presents the result of this analysis concerning the four vocabulary components.

The results confirmed that the significance of differences was due to the low mean score in derivation. It was found that only the contrasts in

which collocations, synonyms, and hyponymy were compared to derivation differed significantly, whereas the other three comparisons in which derivation did not exist were not found to be significantly different.

Null Hypothesis IV. The amount of negotiation in proactive FoF does not result in a differential improvement in vocabulary learning.

Null Hypothesis IV was investigated by comparing the post-test mean scores of participants in the proactive groups including NNP, LNP, and ENP. For this purpose, one way ANOVA and Tukey's post hoc tests were run (Table 16).

Table 14. *ANOVA of Extended Negotiation Proactive Group*

ENP Post-Test	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	979.07	3	326.35	35.77	.000
Within Groups	875.84	96	9.12		
Total	1854.91	96			

Table 15. *Multiple Comparisons of Extended Negotiation Proactive Group*

Dependent Variable	(I) Post-Test Vocabulary Components	(J) Post-Test Vocabulary Components	Mean Difference (I-J)	Std. Error	Sig.
ENP Post-test Tukey HDS	Collocations	Synonyms	.12	.854	.999
		Derivation	7.60	.854	.000
		Hyponymy	1.28	.854	.443
	Synonyms	Collocations	.12	.854	.999
		Derivation	7.48	.854	.000
		Hyponymy	1.16	.854	.529
	Derivation	Collocations	-7.60	.854	.000
		Synonyms	-7.48	.854	.000
		Hyponymy	-6.32	.854	.000
	Hyponymy	Collocations	-1.28	.854	.443
		Synonyms	-1.60	.854	.529
		Derivation	6.32	.854	.000

Table 16. *Descriptive Statistics of Proactive and Reactive Groups*

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Proactive	Extended Negotiation	25	140.1600	6.12155	1.22431	137.6331	142.6869	125.00	148.00
	Limited Negotiation	25	129.6400	7.28514	1.45703	126.6328	132.6472	116.00	144.00
	No Negotiation	25	111.4000	9.25113	1.85023	107.5813	115.2187	94.00	126.00
	Control	25	84.7600	10.03444	2.00689	80.6180	88.9020	69.00	104.00
	Total	100	116.4900	22.65039	2.26504	111.9957	120.9843	69.00	148.00

Table 16 reveals that the post-test mean scores of the participants in the proactive groups increase as the amount of negotiation changes from no negotiation to limited negotiation, and from limited negotiation to extended negotiation (NNP mean = 111.40, LNP mean = 129.64, and ENP mean = 140.16). This suggests that in proactive groups, with the rise in the amount of negotiation, the effectiveness of the treatment increases. For the purpose of deciding if the mean differences among

the proactive groups are statistically significant, one way ANOVA was run (Table 17).

Table 17 shows that the differences among the mean scores in the proactive groups have been significant, F (3) = 212.64, p = 0.000. Therefore, it is concluded that the three proactive groups have not improved similarly.

To find where the differences between the three proactive groups lie, Tukey's post hoc tests were employed (Table 18).

Table 17. *ANOVA of Proactive and Reactive Groups*

		Sum of Squares	df	Mean Square	F	Sig.
Proactive	Between Groups	44147.310	3	14715.770	212.640	.000
	Within Groups	6643.680	96	69.205		
	Total	50790.990	99			

Table 18. *Multiple Comparisons of the Proactive and Reactive Groups*

Dependent Variable	(I) Negotiation factor	(J) Negotiation factor	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
Proactive	Extended Negotiation	Limited Negotiation	10.52000*	2.35296	.000	4.3679	16.6721
		No Negotiation	28.76000*	2.35296	.000	22.6079	34.9121
		Control	55.40000*	2.35296	.000	49.2479	61.5521
	Limited Negotiation	Extended Negotiation	-10.52000*	2.35296	.000	-16.6721	-4.3679
		No Negotiation	18.24000*	2.35296	.000	12.0879	24.3921
		Control	44.88000*	2.35296	.000	38.7279	51.0321
	No Negotiation	Extended Negotiation	-28.76000*	2.35296	.000	-34.9121	-22.6079
		Limited Negotiation	-18.24000*	2.35296	.000	-24.3921	-12.0879
		Control	26.64000*	2.35296	.000	20.4879	32.7921
	Control	Extended Negotiation	-55.40000*	2.35296	.000	-61.5521	-49.2479
		Limited Negotiation	-44.88000*	2.35296	.000	-51.0321	-38.7279
		No Negotiation	-26.64000*	2.35296	.000	-32.7921	-20.4879

Table 18 reveals that all the comparisons in the proactive groups have been significant.

Discussion

Hypotheses

Based on the information presented in Tables 1 and 2, the treatment in the NNP group has been effective in improving vocabulary. The results of this part of the research question are in line with the results found by Doughty and Williams (1998) who found that proactive FoF has a great impact on language learning. They found that proactive FoF can significantly improve learning grammar.

However, this study focused on the vocabulary acquisition, and, in this regard, it indicates that proactive FoF even with no negotiation can promote vocabulary learning significantly.

Moreover, according to the information presented in Tables 3, 4 and 5, the four vocabulary components of collocations, synonyms, derivation, and hyponymy showed significant improvement. However, the three components of collocations, synonyms, and hyponymy were significantly higher than the component of derivation. In conclusion, the results indicate that not all vocabulary components improve in the same

way in a proactive FoF with no negotiation. The reason behind the higher improvement of the three vocabulary components over the component of derivation can be traced back to the difference between the features of this component and those of the other three ones. In fact, the roots and origins of words which are dealt with in derivation can help learners acquire the vocabulary, on the one hand, and make the learner face challenges, on the other. These challenges may have different reasons. Firstly, it may be difficult for the learners to find the root of a word by looking at its appearance. For instance, a learner needs to find that the root of the word "taxidermy" is the word "derma" which means "skin." Secondly, even when the learner finds the root of a word, it might be challenging for him/her to guess its meaning. The previous example can also be applicable here. It is difficult for a learner to make a connection between the root "derma" and its meaning "skin". Finally, the fact that a root changes in appearance from one word to the other makes it difficult for learners to guess their meanings. As an example, the words "claustrophobia" and "technophobe" have the same root, but in the first word, the root is "phobia", and in the second one, the root is "phobe." Therefore, the task of finding the meanings of words based on their etymology can lead the learners face challenges in this regard, and for this reason, learners may be unable to receive high scores in this component as much as the other components.

According to the information presented in Tables 6 and 7, the treatment in the LNP group has been quite effective in improving the subjects' vocabulary. The findings of this part of the research question are similar to the results found by Spada and Lightbown (2008). Based on their researches, grammar improves through proactive FoF. However, this study indicates that proactive FoF with limited negotiation can develop vocabulary acquisition significantly. Moreover, the results of this part of the research question are in line with what Nassaji (2007) asserts. Nassaji remarks that negotiation can significantly promote learning grammar. On the other hand, this study emphasizes the effectiveness of including proactive FoF with limited negotiation in promoting vocabulary learning.

Furthermore, according to the information presented in Tables 8, 9 and 10, the four vocabulary components of collocations, synonyms, derivation, and hyponymy showed significant im-

provement, with the three components of collocations, synonyms, and hyponymy being significantly higher than the component of derivation. The results revealed that not all vocabulary components improved in the same way in the LNP group. The reason for the higher improvement of the three vocabulary components over the component of derivation may be the fact that there are differences between the features of this component and those of the other three ones. The roots and origins of words which are presented in derivation can assist the learners acquire the vocabulary they need, but at the same time, they may make the learners face challenges.

According to the findings presented in Tables 11 and 12, the treatment in the ENP group has been quite successful in promoting the learners' vocabulary. The results of this part of the research question regarding the effectiveness of ENP, irrespective of the vocabulary components, are in line with the results found by Doughty and Williams (1998) and Spada and Lightbown (2008) who maintain that proactive FoF has a great impact on language learning. Besides, Nassaji (2007) asserts that negotiation could significantly promote learning grammar, but, based on the findings of this study, proactive FoF with extended negotiation can promote vocabulary learning significantly.

Furthermore, Tables 13, 14 and 15 reveal that the four vocabulary components of collocations, synonyms, derivation, and hyponymy showed significant improvement, but the component of derivation was not as high as the other components. As a result, vocabulary components are not improved in the same way in a proactive FoF with extended negotiation. The reason why the three vocabulary components had a higher improvement over the component of derivation can be found in the difference between the features of this component and those of the other three ones. From a derivational perspective, although the roots and origins of words can improve the learners' vocabulary, the fact is that derivation makes learners face challenges.

On the whole, Tables16, 17, and 18 indicate that in the proactive groups, the one group experiencing extended negotiation has produced the highest achievement compared with the limited negotiation group. Likewise, the group which experienced limited negotiation has been more efficient than the one with no negotiation. The findings of this part of the research are in accor-

dance with the findings of Pica (2007) and Ellis (2008) who assert that the rise in the amount of negotiation can increase the achievement of the learners. The findings of this study also reveal that negotiation in the proactive FoF can upgrade vocabulary acquisition.

Implications

The present study focused on the degree of negotiation in proactive FoF in order to teach vocabulary. In this way, there are a number of pedagogical implications regarding the issues presented, analyzed, and discussed in this research.

Theoretical Implications: From the theoretical perspective, interaction in the form of negotiation between the teacher and the learners can augment language learning in general (Ellis, 2008; Nassaji, 2007) and vocabulary learning in particular. The present study, however, indicates that there is a difference in the degrees of the learners' achievement, depending on the amount of negotiation; that is, when negotiation is extended, the highest improvement is gained, but when it is limited, a lower improvement is attained. With no negotiation, the lowest accomplishment is gained in vocabulary acquisition. As a result, an important theoretical implication of this study is that although negotiation has been proved to be effective in teaching, the amount of negotiation is another determining factor in improving vocabulary instruction. On the other hand, the inclusion of proactive FoF has been proved to be effective in language learning (Doughty & Williams, 1998; Long, 1991).

The learners gained improvement as a result of the inclusion of three degrees of negotiation and proactive FoF. However, there was a significant difference between the three components of collocations, synonyms, and hyponymy, and the component of derivation; that is, collocations, synonyms, and hyponymy improved significantly higher than derivation. Hence, the theoretical implication of this finding is that not every component of vocabulary can be improved in the same way as a result of negotiation and FoF, and the component of derivation is improved differently from the other three components.

To sum up, this study suggests that regarding proactive FoF, unidirectional input may not be as effective as negotiated input, i.e. the effectiveness of input rises when the teacher involves the learners in the input-providing process.

Practical Implications: Apart from the theoretical implications of this study, there are a number of practical implications concerning teaching, testing, materials development, and teacher education.

An important topic carefully investigated in the present research was negotiation. As it was discussed in the literature review, the role of negotiation has gained widespread attention. Moreover, the results of the study indicate that the amount of negotiation can promote vocabulary learning significantly. As a result, the first implication of this study for teaching is that through extended negotiation, learners can gain higher knowledge over vocabulary acquisition. Likewise, with limited negotiation, the result can be effective but not as efficient as the extended negotiation. Therefore, language teachers can include negotiation as much as possible in the language classes in order to improve the learners' vocabulary acquisition.

Another issue discussed in this research concerned the proactive kind of FoF. The results indicated that proactive FoF can significantly promote vocabulary learning. In other words, informing the learners about the possible occurrence of the mistakes and preventing them to make mistakes can greatly improve vocabulary learning. Therefore, the second implication of the present study for teaching is that by implementing FoF proactively, the teacher can enhance the learners' vocabulary acquisition.

Regarding the vocabulary components studied in the present research, the findings revealed that all four vocabulary components were improved as a result of the two kinds of FoF. However, the component of derivation was in sharp contrast with the other three components. Consequently, the fourth implication of the present study for teaching is that collocations, synonyms, and hyponymy can be promoted higher than derivation through the application of negotiation in proactive FoF. Hence, it is highly recommended that learners promote their knowledge of collocations, synonyms, and hyponymy through negotiation as well as proactive FoF, and it is a good idea for the learners to use negotiation as well as proactive FoF in order to promote their derivation.

This study has a number of implications related to materials development. Firstly, textbook writers can focus on vocabulary items through introducing a negotiation process in order to ensure learners are aware of vocabulary compo-

nents. Based on the findings of this research, extended negotiation has superiority over limited negotiation, and limited negotiation has superiority over no negotiation. Secondly, textbook writers are greatly recommended to include vocabulary tasks in their textbooks in order to promote proactive FoF in the course of instruction so that errors are prevented before they appear in the learning process.

Teacher educators can benefit from the results of this study in different ways. Firstly, they can recommend teachers to include negotiation as much as possible in their teaching process since it can upgrade learning to a great extent. Secondly, they can advise teachers to have proactive FoF in the language classes. In this way, they can promote the accuracy of the learners before they make mistakes. Finally, teachers are advised to focus the learners' attention on the four vocabulary components of collocations, synonyms, derivation, and hyponymy by including negotiation and proactive FoF in language classes.

Conclusion

Negotiation, as well as proactive FoF, is an essential strategy for promoting learners' vocabulary knowledge. In this regard, a major facilitating factor in promoting vocabulary knowledge is to focus the learners' attention on the form of the language through negotiation. It is, therefore, important to provide learners with FoF through negotiated input in order to maximize their vocabulary knowledge.

The present study attempted to shed light on the type of negotiation and proactive FoF in order to improve the four vocabulary components in this research. The results revealed a need for more negotiation to be included and practiced in EFL classes, as well as a need for the inclusion of FoF in language classes proactively. Such changes would no doubt benefit both learners and educators towards achieving better educational and pedagogical results.

In conclusion, this study suggests that the impact of unidirectional input, as well as unidirectional feedback, is not as significant as that of negotiated input and negotiated feedback. Moreover, the effectiveness of the feedback increases when learners' attention are attracted to the form of the language. Following these insights from the study, the researcher recommends an appropriate application of negotiated input and FoF in EFL context.

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