The Amount of Negotiation in Reactive Focus on Form in Vocabulary Acquisition

Parviz Maftoon and Bahram Bagheri*

Science and Research Branch, Islamic Azad University, Tehran, Iran

Corresponding author: Bahram Bagheri

ABSTRACT: The interactional strategies of negotiation and reactive focus on form (FoF) have gained considerable attention in second language research. However, the combination of negotiation and reactive FoF has not been examined with regard to L2 vocabulary learning. To address this gap, the present study investigated how the amount of negotiation and reactive FoF affected 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 reactive FoF. A pretest-posttest design was employed in order to detect any improvement in the participants' vocabulary knowledge components, consisting of collocations, synonyms, derivation, and hyponymy. The results revealed that (a) participants' vocabulary knowledge significantly improved in the experimental groups, (b) extended negotiation was significantly superior to limited negotiation, and limited negotiation was significantly superior to no negotiation in reactive FoF, and (c) derivation was the least affected vocabulary component by the treatment.

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

INTRODUCTION

The role of negotiation in EFL classes has attracted considerable theoretical and empirical attention in recent years as a result of the emergence of form-focused instruction (FFI), on the one hand, and the importance attributed to the role of communicative interaction, on the other. (Pica ,1994, cited in Nassaji, 2007) maintains that within the interactional perspective on L2 learning, negotiation has been defined as the interactional strategies used to reach a solution to a problem in the course of communication. Concerning the emphasis on this idea in language classes, two types of negotiation have arisen. In this regard, (Ellis ,2008) makes a distinction between negotiation of meaning and negotiation of form, asserting that the former takes place through the collaborative work undertaken by speakers to achieve mutual understanding, while the latter refers to a situation in which one speaker addresses a linguistic problem in the speech of a learner.

The idea behind the role of negotiation comes from the Vygotskian sociocultural theory (SCT) of L2 learning. (Lantolf , 2007) points out that the central and distinguishing concept of SCT is that higher forms of mental activity are mediated by others in social interaction, by oneself through private speech, as well as artifacts such as tasks and technology. The primary concern of the SCT, however, is the mediation by others in social interaction. In this way, dialogic interaction enables a teacher to create a context in which novices can participate actively in their own learning. In SCT, there is a close relationship between interpersonal activity and intramental activity, the former serving as the precursor of the latter (Ellis, 2008). In other words, sociocultural second language acquisition researchers believe that learning takes place primarily on a social track and then on a psychological field.

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 only one elicitation-response between the teacher and

the learner, limited negotiation occurs. And, finally, when there is more than one elicitation-response, there will be extended negotiation in the teaching process.

Since negotiation can be studied in terms of different kinds of FFI, the researcher needs to clarify form and its subcategories. (Ellis et al., 2002) assert that the term "form" is often used to refer exclusively to "grammar." However, it is used more generally to refer to any aspect of linguistic form--phonological, graphological, lexical, or grammatical (p. 419).

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 learners cannot acquire all the usages of vocabulary items, 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 vocabulary learning.

For the purpose of researching the importance of proactive FFI and negotiation, this study aimed at focusing on those components of vocabulary that have proved difficult for language learners. Among these vocabulary components, collocations are a stumbling block 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. (Moreover, Coady ,1997) states 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.

Apart from collocations, there are other subcategories of vocabulary that were investigated in the present study. (Reppen and Simpson ,2002) claim that synonymous words are also problematic, and learners do not sometimes know their actual use and functions. Moreover, 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.

The third vocabulary subcategory which needs investigation is word derivation. Learning word derivation can be beneficial for learners because by learning derivation, learners become conscious of the roots, prefixes, and suffixes. Moreover, 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) shed light on this issue by saying 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 regarding how it fits into the vocabulary hierarchy, hyponymy can play a key role in increasing the information that a learner needs to possess.

Research Questions

Considering the significance of an investigation on the degree of negotiation in reactive FoF and its contribution to vocabulary learning, the following groups were formed:

Group 1: Subjects experiencing no negotiation in reactive FoF (NNR)

Group 2: Subjects experiencing limited negotiation in reactive FoF (LNR)

Group 3: Subjects experiencing extended negotiation in reactive FoF (ENR)

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

Based on the groups mentioned above the four research questions are raised as follows:

1. Does no negotiation in reactive FoF (NNR) result in an improvement in vocabulary learning?

2. Does limited negotiation in reactive FoF (LNR) result in an improvement in vocabulary learning?

3. Does extended negotiation in reactive FoF (ENR) result in an improvement in vocabulary learning?

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

MATERIALS AND METHODS

Participants

In this study, the three major degrees of negotiation were investigated. Each negotiation type was accompanied by reactive 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 participants 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:

In the four groups mentioned above, the first three groups made up the experimental groups, while the fourth group was regarded as the control group. The subjects of this study were both male and female students who studied English 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 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.

3.2.3 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 reactive 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.

3.2.4 Target Words

The target words, i.e., the words the researchers decided to teach, were selected from the currently-used authentic materials.

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 post-tested.

After the selection of four intact groups, all four groups were given the CELT test which is popular for evaluating participants' proficiency level. 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 Vocabulary Levels Test (VLT) which assesses learners' vocabulary knowledge was administered. As a result of this procedure, the mean scores served as an indication of the level of the vocabulary knowledge of the participants. The mean scores indicated that the learners' vocabulary knowledge was at the 3000 level, and, based on this finding, the researchers 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 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.

In the fourth phase, the first experimental group experienced no negotiation in reactive FoF. In this part of the study, the researcher only focused on form without any negotiation with the students in a reactive method. That is, after the students made mistakes in using the words, the teacher corrected them only by referring to the correct forms of the words. The following example regarding synonyms indicates how this phase of the study was carried out.

Teacher: Look at this sentence, "The woman is contemplating leaving her hometown." In this sentence, what is the synonym of the word "contemplate"?
Learner: It means "enjoy."
Teacher: No, it doesn't mean "enjoy." In fact, the word "contemplate" means "consider."

The fifth phase of the present study contained the second experimental group in which limited negotiation in reactive FoF was experienced. In this section of the study, there was only one elicitation-response between the teacher and the learners whenever they made mistakes in using vocabulary. The following example regarding synonyms reveals how this phase of the study was performed.
Teacher: In the phrase "A lot of anxiety came over her." what is a synonym for the word "anxiety"?
Learner: It means "anger."
Teacher: Not exactly. The word "anxiety" means "nervousness." What is a synonym for the word "anxiety"?
Learners: "Nervousness is the synonym of "anxiety."

The sixth phase of the research involved the third experimental group among whom extended negotiation in reactive FoF was carried out. Upon the students' errors in using a word, extended negotiation in which more than one elicitation-response occurred between the teacher and the students was provided. There is an example about synonyms in the following section to clarify this phase of the study.
Teacher: In the sentence "He walked feebly at an old age." What is a synonym for the word "feebly"?
Learner: It means "slowly."
Teacher: No, in fact, "feebly" is a synonym for the word "weakly." What is a synonym for the word "feebly"?
Learners: It means "weakly."
Teacher: Ali, what does "feebly" mean?"
Ali: It means "weakly."

In the seventh phase of the study, the researchers provided neither negotiation nor FoF to 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 the last phase of the study, the 160 lexical items were post-tested. The mean scores of the post-test in the four groups were compared through one-way ANOVA with a post hoc using Tukey procedure. Moreover, the mean scores of the pre-tests were compared with the mean scores of the post-tests through Repeated Measurement with a post-hoc. In this way, the researchers determined the degrees of success in each of the four groups.

RESULTS AND DISCUSSION

Results

For the purpose of testing Null Hypothesis I which states that no negotiation in reactive FoF does not result in an improvement in vocabulary learnig, a comparison was made between the results of the pre-test and post-test of the NNR group.

Table 1. Descriptive Statistics of No Negotiation Reactive Group

Group	Mean	Std. Deviation	N
Pre-Test NNR	12.44	4.10	25
Post-Test NNR	104.20	6.27	25

Table 1 depicts that the post-test mean scores obtained by the participants in the NNR group (M = 104.20) is much higher than the pre-test mean scores (M = 12.44). This indicates that the treatment in the NNR group has been successful.

In the next step, the statistical significance of the difference between the pre-test and post-test mean scores was run to determine a paired samples t-test. Table 2 shows the result of the treatment in this group.

Table 2. Paired Samples T-Test of No Negotiation Reactive Group

Pairs	Mean	Std. Deviation	Std. Error Mean	T	Df	Sig. (2-tailed)
Pair 4 NNR Pre-Test Post-Test	-91.76	7.37	1.47	-62.23	24	0

Comparing the pre-test and post-test mean difference in Table 2, the researcher found that the mean difference is statistically significant, T (24) = 62.23, p = 0.000. As a result, Null Hypothesis I indicating that no negotiation in reactive FoF (NNR) does not result in an improvement in vocabulary learning is rejected at the 95 % confidence level.

Considering the fact that there were four vocabulary components in each group, it was necessary to evaluate how the treatment affected each component. For the purpose of examining which one of the vocabulary components has improved in comparison to the others, a one way ANOVA and Tukey's post hoc tests were run. Table 3 presents the descriptive results of this analysis.

Table 3. Descriptives of No Negotiation Reactive Group

NNR Post-Test	N	Mean	Std. Deviation	Std. Error
Collocations	25	28.44	2.58	.51
Synonyms	25	28.40	1.78	.35
Derivation	25	20.40	4.41	.88
Hyponymy	25	27.48	2.27	.45

Table 3 clearly displays that the mean scores of the three components of collocations (M = 28.44), synonyms (M = 28.40), and hyponymy (M = 27.48) were close, while the mean score of the component of derivation (M = 20.40) was lower, indicating that in comparison with the other three components, the component of derivation has not been significantly improved. To examine if the difference between the means of the vocabulary components was statistically significant, a one way ANOVA was run (Table 4).

Table 4. ANOVA of No Negotiation Reactive Group

NNR Post-Test	Sum of Squares	Df	Mean Squares	F	Sig.
Between Groups	1128.36	3	376.12	43.58	.000
Within Groups	828.40	96	8.62		
Total	1956.76	96			

As Table 4 demonstrates, the difference between the mean scores has been significant, F (3) = 43.58, p = 0.000. Therefore, the components have not been improved in the same way. To determine the areas of difference between the components, Tukey's post hoc tests were employed (Table 5).

Table 5. Multiple Comparisons of No Negotiation Reactive Group

Dependent Variable	(I) Post-Test Vocabulary Components	(J) Post-Test Vocabulary Components	Mean Difference (I-J)	Std. Error	Sig.
NNR Post-test Tukey HDS	Collocations	Synonyms	.04	.831	1.000
		Derivation Hyponymy	8.04	.831	.000
			.96	.831	.656
	Synonyms	Collocations	-.04	.831	1.000
		Derivation Hyponymy	8.00	.831	.000
			.92	.831	.686
	Derivation	Collocations	-8.04	.831	.000
		Synonyms	-8.00	.831	.000
		Hyponymy	-7.08	.831	.000
	Hyponymy	Collocations	-.96	.831	.656
		Synonyms	-.92	.831	.686
		Derivation	7.08	.831	.000

Table 5 shows that out of the six possible comparisons, three of them were significant. In fact, the comparisons related to derivation were significant, while those which were not related to derivation were not significant.

In order to test Null Hypothesis II stating that limited negotiation in reactive focus on form does not improve the learners' vocabulary knowledge, the researchers made a comparison between the results of the pre-test and post-test scores of the LNR group. Table 6 shows the descriptive statistics of this group.

Table 6. Descriptive Statistics of Limited Negotiation Reactive Group

Group	Mean	Std. Deviation	N
Pre-Test LNR	14.64	3.85	25
Post-Test LNR	121.68	7.17	25

Comparing the post-test mean scores obtained by the participants in the LNR group (M = 121.68) with the pre-test mean scores (M = 14.64), it was found that the learners in this group improved in their vocabulary acquisition. To confirm the statistical significance of the difference between the pre-test and post-test mean scores, paired samples t-test was employed (Table 7).

Table 7. Paired Samples T-Test of Limited Negotiation Reactive Group

Pairs	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Pair 5 LNR Pre-Test Post-Test	-107.04	8.50	1.70	-62.94	24	0

The result of the paired samples t-test further reveals that the mean difference between the pre-test and post-test scores is statistically significant in the LNR group, T (24) = 62.94, p = 0.000. Null Hypothesis II is, therefore, rejected at the 95 % confidence level.

In this study, it was necessary to examine if the treatment affected each of the subcategories of vocabulary similarly or not. For this purpose, a one way ANOVA and Tukey's post hoc tests were used to find out which component has improved in comparison to the others (Table 8).

Table 8. Descriptives of Limited Negotiation Reactive Group

LNR Post-Test	N	Mean	Std. Deviation	Std. Error
Collocations	25	33.20	1.87	.37
Synonyms	25	33.56	1.85	.37
Derivation	25	22.36	4.11	.822
Hyponymy	25	32.56	1.89	.37

As Table 8 illustrates, the mean scores of the three components of collocations (M = 33.20), synonyms (M = 33.56), and hyponymy (M = 32.56) were close to one another. However, the mean score of the component of derivation (M = 22.36) was lower, which indicates that derivation has not been significantly improved in comparison with the other three components. In order to examine the statistical significance of the difference between the means of the vocabulary components, a one way ANOVA was run (Table 9).

Table 9. ANOVA of Limited Negotiation Reactive Group

LNR Post-Test	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	2178.28	3	726.0	105.92	.000
Within Groups	658.08	96	6.85		
Total	2836.36	96			

Table 9 presents the difference between the mean scores which has been significant, F (3) = 105.92, p = 0.000. Hence, the components have not been improved in the same way. In order to see where exactly the differences between the components lie, Tukey's post hoc tests were used. Table 10 illustrates the result of this comparison.

Table 10. Multiple Comparisons of Limited Negotiation Reactive Group

Dependent Variable	(I) Post-Test Vocabulary Components	(J) Post-Test Vocabulary Components	Mean Difference (I-J)	Std. Error	Sig.
LNR Post-test Tukey HDS	Collocations	Synonyms	-.36	.741	.962
		Derivation Hyponymy	10.84	.741	.000
			.64	.741	.823
	Synonyms	Collocations	.36	.741	.962
		Derivation Hyponymy	11.20	.741	.000
			1.00	.741	.533
	Derivation	Collocations	-10.84	.741	.000
		Synonyms	-11.20	.741	.000
		Hyponymy	-10.20	.741	.000
	Hyponymy	Collocations	-.64	.741	.823
		Synonyms	-1.00	.741	.533
		Derivation	10.20	.741	.000

As Table 10 shows, three of the comparisons were significant, while the other three ones were not significant. In fact, the comparisons which were related to derivation were found to have significant differences. However, the comparisons in which derivation did not exist were not significant.

To test Null Hypothesis III, i.e., extended negotiation in reactive FoF does not result in an improvement in vocabulary learning, a comparison was made between the results of the pre-test and post-test of the ENR group. Table 11 presents the descriptive statistics of this group.

Table 11. Descriptive Statistics of Extended Negotiation Reactive Group

Group	Mean	Std. Deviation	N
Pre-Test ENR	14.60	4.07	25
Post-Test ENR	135.32	9.85	25

As Table 11 demonstrates, the post-test mean scores of the participants in the ENR group (M = 135.32) is much higher than in the pre-test mean scores (M = 14.60). The significance of the difference between the pre-test and post-test mean scores in the ENR group can be seen in the paired samples t-test (Table 12).

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

Pairs	Mean	Std. Deviation	Std. Error Mean	t	df	Sig. (2-tailed)
Pair 6 ENR Pre-Test Post-Test	-120.72	11.44	2.28	-52.74	24	0

As Table 12 shows, the mean difference between the pre-test and post-test is statistically significant, T (24) = 52.74, p = 0.000. As a result, Null Hypothesis III is safely rejected. However, it was essential to examine how the treatment affected each component. For the purpose, a one way ANOVA and Tukey's post hoc tests were used in order to examine which component has improved in comparison to the others. Table 13 presents the descriptive results of this analysis.

Table 13. Descriptives of Extended Negotiation Reactive Group

ENR Post-Test	N	Mean	Std. Deviation	Std. Error
Collocations	25	37.20	2.19	.44
Synonyms	25	37.12	2.18	.437
Derivation	25	24.96	6.64	1.33
Hyponymy	25	36.44	2.84	.56

While the mean scores of the three components of collocations (M = 37.20), synonyms (M = 37.12), and hyponymy (M = 36.44) were close, the mean score of the component of derivation (M = 24.96) was lower (Table 13). This indicates that derivation has not been improved significantly in comparison with the other three components. To analyze whether the difference between the means of the vocabulary components was statistically significant, a one way ANOVA was run (Table 14).

Table 14. ANOVA of Extended Negotiation Reactive Group

ENR Post-Test	Sum of Squares	df	Mean Squares	F	Sig.
Between Groups	2690.75	3	896.91	57.95	.000
Within Groups	1485.76	96	15.47		
Total	4176.510	96			

Since the difference between the mean scores has been significant, F (3) = 57.95, p = 0.000, it is concluded that the components have not been improved similarly. In order to find where the differences between the four vocabulary components lie, Tukey's post hoc tests were employed (Table 15).

Table 15. Multiple Comparisons of Extended Negotiation Reactive Group

Dependent Variable	(I) Post-Test Vocabulary Components	(J) Post-Test Vocabulary Components	Mean Difference (I-J)	Std. Error	Sig.
ENR Post-test Tukey HDS	Collocations	Synonyms	.08	1.113	1.000
		Derivation Hyponymy	12.24	1.113	.000
			.76	1.113	.90
	Synonyms	Collocations	-.08	1.113	1.000
		Derivation Hyponymy	12.16	1.113	.000
			.68	1.113	.928
	Derivation	Collocations	-12.24	1.113	.000
		Synonyms	-12.16	1.113	.000
		Hyponymy	-11.48	1.113	.000
	Hyponymy	Collocations	--.76	1.113	.903
		Synonyms	-.68	1.113	.928
		Derivation	11.48	1.113	.000

Table 15 reveals that three of the comparisons regarding the ones leading to derivation were significant. However, the three comparisons which did not include derivation were not significant.

Null Hypothesis IV concerning the effect of the amount of negotiation in reactive FoF on the learners' vocabulary learning was investigated by comparing the post-test mean scores of participants in the research groups including NNR, LNR, and ENR. For this purpose, a one way ANOVA and Tukey's post hoc tests were run (Table 16).

Table 16. Descriptive Statistics of Research Groups

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean (Lower Bound)	95% Confidence Interval for Mean (Upper Bound)	Minimum	Maximum
Extended Negotiation	25	135.32	8.85	1.97	137.63	142.63	125	148
Limited Negotiation	25	121.68	7.17	1.43	126.63	132.64	116	144
No Negotiation	25	104.20	6.27	1.25	107.58	115.21	94	126
Control Group	25	84.76	10.03	2.00	80.61	88.92	69	104
Total	100	111.49	20.81	2.08	111.99	120.98	69	148

Table 16 reveals that the post-test mean scores of the participants in the reactive groups increased as the amount of negotiation changed from no negotiation to limited negotiation, and from limited negotiation to extended negotiation (NNR mean = 104.20, LNR mean = 121.68, and ENR mean = 135.32). This suggests that in research groups, with the rise in the amount of negotiation, the effectiveness of the treatment increases. To determine whether the mean differences among the research groups were statistically significant, a one way ANOVA was run (Table 17).

Table 17.ANOVA of Research Groups

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	35983.55	3	11994.51	166.26	.000
Within Groups	6925.44	96	72.14		
Total	42908.99	96			

Table 17 shows that the differences among the mean scores in the reactive groups have been significant, F (3) = 166.26, p = 0.000. Therefore, it can be concluded that the three groups have not improved similarly. To explore where the differences between the three groups lied, Tukey's post hoc tests were employed. Table 18 reveals that all the comparisons in the research groups have been significant.

Table 18.Multiple Comparisons of the Proactive and Reactive Groups

Amount of Negotiation (I)	Amount of Negotiation (J)	Mean Difference	Std. Error	Sig.	95% Confidence Interval (Lower Bound)	(95% Confidence Interval (Upper Bound)
Extended Negotiation	Limited Negotiation No Negotiation	13.64	2.40	.000	7.35	19.92
	Control Group	31.12	2.40	.000	24.83	37.40
		50.56	2.40	.000	44.27	56.84
Limited Negotiation	Extended Negotiation	-13.64	2.40	.000	-19.92	-7.35
	No Negotiation Control Group	17.48	2.40	.000	11.19	23.76
		36.92	2.40	.000	30.63	43.20
No Negotiation	Extended Negotiation	-31.12	2.40	.000	-37.40	-24.83
	Limited Negotiation Control Group	-17.48	2.40	.000	-23.76	-11.19
		19.44	2.40	.000	-13.15	25.72
Control Group	Extended Negotiation	-50.56	2.40	.000	-56.84	-44.27
	Limited Negotiation No Negotiation	-36.92	2.40	.000	-43.20	-30.63
		-19.44	2.40	.000	-25.72	-13.15

Discussion
Hypotheses

According to the information presented in Tables 1 and 2, the treatment in the NNR group has been effective in improving vocabulary. The results of this part of the research question are in accordance with the results found by

(Long ,1991) who states that reactive FoF has a great impact on language learning. He found that reactive FoF can improve learning grammar significantly. However, this study indicates that reactive FoF with no negotiation can also promote vocabulary learning significantly.

Moreover, as Tables 3, 4 and 5 indicate, the four vocabulary components revealed significant improvement. However, the three components of collocations, synonyms, and hyponymy improved higher than the component of derivation. In conclusion, the results indicate that not all vocabulary components improved in the same way in the NNR group.

The higher improvement of the three vocabulary components over the component of derivation signifies that there are differences between the features of this component and those of the other three ones. In derivation, the roots of words can help learners in vocabulary acquisition, but, in the meantime, they may bring about challenges for learners. These challenges may come from different sources. Firstly, roots of words come from different languages, and in their backgrounds there have been some changes from one language to another. It can be difficult for a learner, for instance, to find that the root of the word "reverence" is "vereri." On the other hand, after getting access to the roots, it is still hard for a learner to find its meaning. For example the root "vereri" which means "standing in awe of" can be difficult to be remembered by learners. Finally, roots change in appearance from one word to the other; this makes it difficult for learners to guess their meanings. As an example, such words as "philanthropy" and "anthropology" whose roots are the same, have changed in appearance. As a result, the task of finding the meanings of words based on their derivation can lead learners to face challenges in this regard.

Tables 6 and 7 reveal that the treatment in the LNR group has been effective in improving vocabulary. The results of this part of the research are in line with the results found by (Dornyei , 2009). According to his findings, reactive FoF had a great impact on language learning. On the other (hand,Nassaji ,2007) shed light on the significant impact of negotiation on learning grammar. However, this study reveals that reactive FoF with limited negotiation can promote vocabulary learning significantly.

Moreover, according to the information presented in Tables 8, 9, and 10, the four vocabulary components showed significant improvement, and the components of collocations, synonyms, and hyponymy improved more than the component of derivation. In conclusion, the researchers found that not all vocabulary components are improved in the same way in the LNR group.

The reason why there is a higher improvement in the three vocabulary components than the component of derivation can be due to the difference between the features of this component and those of the other three ones. In essence, it is difficult for the learners to guess the roots of words. These challenges may be due to special reasons. Firstly, roots of words come from different languages, and for this reason, it is difficult to find their meanings. For instance, the root of the word "genocide" is the word "genus" which means "a class of people," and it is rather difficult to be guessed by the learner. On the other hand, when the learner finds the root of a word, it might be difficult for him/her to find its meaning, such as the previous example. Finally, roots change in their appearance, and, as a result, it is difficult for learners to guess their meanings. The words "technophile" and "philologist" have the same root as "phile," but there is a change in their appearance from one word to the other. Hence, finding word meanings based on their derivation can cause the learners to have challenges.

According to the information presented in Tables 11 and 12, the treatment in the ENR group has been quite effective in improving the learners' vocabulary. The results of this part of the research question are in accordance with the results found by(Batstone ,2007and Sharwood Smith ,1993). They found that reactive FoF has a great impact on language learning. On the other (hand, Nassaji ,2007) asserts that negotiation could significantly promote learning grammar. This study showed that reactive FoF with extended negotiation also promoted vocabulary leaning significantly.

Moreover, Tables 13, 14 and 15 showed that the four vocabulary components had significant improvement, and the three components of collocations, synonyms, and hyponymy improved more than the component of derivation. Therefore, the results indicated that not all vocabulary components improved in the same way in the ENR group.

The higher improvement of the three vocabulary components over the component of derivation may arise from the difference between the feature of this component and that of the other three ones. In fact, acquiring the meanings of the roots of words can be difficult for the learners due to different reasons. Firstly, the roots may come from different languages, and it is difficult to guess their meanings. For instance, it may be difficult to find the root of the word "theology" which is "thea" meaning "religion." Secondly, even after finding the root of a word, it might be difficult for a learner to guess its meaning. In the previous example, it is difficult for a learner to make a connection between the root "thea" and its meaning "religion." Finally, roots do not always have the same appearance. As an example, the words "hypochondria" and "hypnosis" have the same root, but in the first word, the root is "hypo," and in the second one, the root is "hypnos." Therefore, finding the meanings of words based on their derivation can cause learners face challenges.

On the whole, Tables 16, 17, and 18 revealed that the research groups, the extended negotiation group outperformed the limited negotiation group, and in the same way, the limited negotiation group resulted in a higher achievement than the no negotiation group. The results of this part of the research question are in line with the findings of (Batstone ,2007) and (Ellis ,2008) who assert that the amount of negotiation and reactive FoF have positive effects on the improvement of the learners. This study, moreover, reveals that the amount of negotiation in the reactive FoF can upgrade vocabulary learning significantly.

CONCULSION

Negotiation, as well as reactive 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. As a result, it is of great importance 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 reactive 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 reactively. Such changes would benefit both learners and educators towards achieving better educational and pedagogical results.

To sum up, 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 reactive FoF in EFL context.

The Authors

Parviz Maftoon is Associate Professor of teaching English at Islamic Azad University, Science and Research Campus, Tehran, Iran. He received his Ph.D. degree from New York University in 1978 in Teaching English to Speakers of Other Languages. His primary research interests concern EFL writing, second language acquisition, and syllabus design. He has published and edited a number of research articles and books. He is currently on the editorial board of some language journals in Iran.

Bahram Bagheri is a Ph.D. holder of TEFL at Islamic Azad University, Science and Research Branch in Tehran. He holds an M.A. in TEFL and a B.A. in English Translation, both from Islamic Azad University, Tehran Central Branch. He has been a faculty member of Islamic Azad University, Garmsar Branch since 2001. He has been teaching English at the Iran Language Institute (ILI) for about 17 years and is currently working in the research and planning department of the ILI. He has been involved in materials development and test construction, his main areas of interest.

REFERENCES

Arnaud PJL & Savignon SJ. 1997. Rare words, complex lexical units and the advanced learner. In J. Coady & T. Huckin (Eds.), Second language vocabulary acquisition (pp. 157-173). Cambridge: Cambridge University Press.

Batstone R. 2007. Recontextualizing focus on form. In S. Fotos & H. Nassaji (Eds.), Form-focused instruction and teacher education (pp. 87-99). Oxford: Oxford University Press.

Coady J. 1997. L2 vocabulary acquisition: A synthesis of the research. In J. Coady & T. Huckin (Eds.), Second language vocabulary acquisition (pp. 273-290). Cambridge: Cambridge University Press.

Cook V. 2001. Second language leaning and language teaching. London: Arnold Publishers Doughty, C., & Williams, J. (1998a). Issues and terminology. In C. Doughty & J. Williams (Eds.), Focus on form in classroom second language acquisition (pp. 1-14). Cambridge: Cambridge University Press.

Dornyei Z. 2009. The psychology of second language acquisition. Oxford: Oxford University Press.

Ellis R. 2008. The study of second language acquisition (2nd ed.). Oxford: Oxford University Press.

Ellis R, Basturkmen H & Loewen S. 2002. Doing focus on form. System, 30, 419-432.

Hadley AO. 2003. Teaching language in context. New York: Heinle & Heinle Publishers.

Harmer J. 2001. The practice of English language teaching. London: Pearson Education.

Lantolf JP. 2007. Conceptual knowledge and instructed second language learning: A sociocultural perspective. In S. Fotos & H. Nassaji (Eds.), Form-focused instruction and teacher education (pp. 35-54). Oxford: Oxford University Press.

Long MH. 1991. Focus on form: A design feature in language teaching methodology. In K. de Bot, R. Ginsberg, & C. Kramsch (Eds.), Foreign language research in cross-cultural perspective (39-52). Amsterdam: John Benjamins.

Nassaji H. 2007. Reactive focus on form through negotiation on learners' written errors. In S. Fotos & H. Nassaji (Eds.), Form-focused instruction and teacher education (pp. 117-129). Oxford: Oxford University Press.

Nation P. 2002. Best practice in vocabulary teaching and learning. In J. C. Richards & W. A. Renandya (Eds.), Methodology in language teaching (pp. 267-272). Cambridge: Cambridge University Press.

Payne Harris D & Palmer LA. 1986. CELT. New York: McGraw-Hill.

Reppen R & Simpson R. 2002. Corpus linguistics. In N. Schmitt (Ed.), An introduction to applied linguistics (pp. 92-111). London: Arnold Publishers.

Richards JC & Rodgers T. 2001. Approaches and methods in language teaching (2nd ed.). Cambridge: Cambridge University Press.

Schmitt N, Schmitt D & Clapham C. 2001. Developing and exploring the behavior of a new version of the vocabulary levels test. Language Testing, 18 (1), 55-88.

Sharwood Smith, M. 1993. Input enhancement in instructed SLA: Theoretical bases. Studies in Second Language Acquisition 15 (2), 165-179.

Zimmerman CB. 1997. Historical trends in second language vocabulary instruction. In J. Coady & T. Huckin (Eds.), Second language vocabulary acquisition (pp. 5-19). Cambridge: Cambridge University Press.