

The Comparative Effects of Comprehensible Input, Output and Corrective Feedback on the Receptive Acquisition of L2 Vocabulary Items

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Abstract

In the present study, the comparative effects of comprehensible input, output and corrective feedback on the receptive acquisition of L2 vocabulary items were investigated. Two groups of beginning EFL learners participated in the study. The control group received comprehensible input only, while the experimental group received input and was required to produce written output. They also received corrective feedback on their lexical errors if any. This could result in the production of modified output. The results of the study indicated that (a) the group which produced output and received feedback (if necessary) outperformed the group which only received input in the post-test, (b) within the experimental group, feedback played a greater role in learners' better performance than output, (c) also a positive correlation between the amount of feedback an individual learner received, and his overall performance in the post-test; and also between the amount of feedback given for a specific word and the correct responses given to its related item in the post-test was found. The findings of this study provide evidence for the role of output production along with receiving corrective feedback in enhancing L2 processing by drawing further L2 learners' attention to their output which in turn may result in improving their receptive acquisition of L2 words. Furthermore, as the results suggested, feedback made a more contribution to L2 development than output.

Keywords: comprehensible input, output, interaction, corrective feedback, modified output, receptive vocabulary acquisition

1. Introduction

Form focused instruction (FFI), as opposed to meaning-focused instruction (MFI); focuses on the question whether explicit attention to formal aspects of language, and instruction of forms of language can be beneficial for successful language learning. Meaning-focused instruction; on the other hand, concerns the natural process of language acquisition in which it is widely believed that teachers' intervention may impede the acquisition of a language. In fact, MFI was developed as a response to the drawbacks of traditional approaches to language teaching which emphasized the mastery of language forms (Hedge, 2000). Hence, in MFI language teachers should avoid focusing on language forms and let students attend to meaning alone. This is called the noninterventionist view (Long & Robinson, 1998) in which focusing on the formal aspects of language is discouraged.

Meaning-focused instruction; however, had its own shortcomings. One of the shortcomings, for instance, was a lack of grammatical accuracy in learners who were instructed based on this approach. Doughty and Williams (1998) contended that MFI does not provide any solution for this problem. In fact, as Long and Robinson (1998) argue, exposure to language use and meaning is not sufficient for learners to gain accuracy, and they should have some degrees of focus on form to achieve this purpose.

The problems observed in MFI; accordingly, led to a debate between the form-focused approach and meaning-focused approach, as a result of which some developments were made in this field. Examples of such developments were new perspectives in the field of FFI such as Schmidt's noticing hypothesis (1990) and Long's focus on form (1991).

Long (1991) and Long and Robinson (1998), for instance, believe that FFI and MFI are both very essential for language learning and they should complement each other. The new approach emerged from this notion, was called focus on form (Long, 1991). Long's definition of focus on form (FONF) is as follows:

Focus on form overtly draws students' attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning or communication. (Long, 1991, pp. 45-46)

Therefore, in focus on form, students temporarily and incidentally focus on some forms while they are engaged in a communicative activity. Long (1991) contends that some attention to form is necessary. Furthermore, with respect to the new idea that comprehensible input is not sufficient for language learning and that the input learners receive may not be used as intake for learning, the focus of studies shifted from attention to meaning to noticing the form (Izumi, 2002). These studies (Robinson, 1995; Schmidt, 1990, 1995; and Tomlin & Villa, 1994) have all reached the general consensus that attention and noticing are essential for learning to happen. For instance, the "noticing hypothesis" proposed by Schmidt (1995, 2001) maintains that learners will not learn something unless they notice it; and intake is the part of the input that they notice. However, the issue which is of a greater importance is the way through which a form can be noticed.

1.1 Pedagogical Means of Noticing the Form

Noticing the form may be possible through some pedagogical means such as "visual input enhancement" (Sharwood Smith, 1993), "focus on form" (Long, 1991; and Long & Robinson, 1998) explained briefly above, "output" (Swain, 1985) and "interaction" (Long, 1991) where L2 learners have an opportunity to receive corrective feedback on their erroneous utterances.

In his focus on form approach, for instance, Long (1991) argued that meaning-focused instruction alone, may not be sufficient for language acquisition to take place, and that some degrees of attention to formal elements of the language may be necessary. It should be noted that in FONF, as defined by Long (1991), attention is paid to form and meaning simultaneously.

With regards to input enhancement (Sharwood Smith, 1991), L2 learners' attention is focused on language forms by making the forms more perceptually salient. For example, Izumi (2002) contends that in input enhancement, attention is drawn to forms externally, i.e. through typographical means such as bolding or italicizing the forms.

Output, which is another pedagogical means of drawing attention to forms, was put forward by Swain (1985, 1995) in her output hypothesis. Swain (1985) claims that students need to engage in language production in order to increase their language proficiency. In the same line, Izumi (2002) argues that output draws learners' attention to forms internally, in which learners themselves determine what form is necessary to focus on during the process of production.

1.2 Output Production

Swain (1985) believes that output production helps learners focus on language forms, and this can make the acquisition process easier. She contends that without pushed output, learners will only try to comprehend the input they receive, i.e. they only process the meaning, and this cannot guarantee acquisition. However, producing language is believed to enhance learning in which learners will be aware of what they can and cannot say in the target language. This will increase their sensitivity to certain aspects of language which are difficult and complex for them to do.

The ideas about the role of output production in language learning were originated from the studies of immersion programs in Canada (Nassaji & Fotos, 2011). In the immersion programs, despite the abundant exposure to comprehensible input, learners' language still contained inaccuracy in certain L2 aspects. Under these circumstances, Swain (1985) argued that exposure to meaningful language and comprehensible input was not enough for language acquisition. In other words, she noted that in immersion programs in which the focus was only on comprehensible input, there were not enough opportunities to produce L2, which "pushes learners beyond their current level of interlanguage"; this is what Swain called pushed output (Nassaji & Fotos, 2011, p., 104).

In her output hypothesis; conversely, Swain (1985, 1995) claims that in order to acquire certain aspects of L2, comprehensible input is not sufficient and comprehensible output is needed. Swain believes that by producing output, learners can receive additional input from others (the teacher or other students). This implies that, output production may lead to interactions in which some communication problems possibly occur and accordingly, learners receive feedback from their interlocutors. According to Swain and Lapkin (1995), output helps learners become aware of their linguistic problems or notice the gap in their knowledge (through the feedback they receive) and it can determine what aspects of language they should pay more attention to.

Swain (1995) and Swain and Lapkin (1998) contend that a convenient context for language production is conversational interactions where some communication breakdowns may occur, as a result of which learners might receive corrective feedback from their interlocutors. This is what Long (1996, 1985) called the *interaction hypothesis*, according to which, modified interactions i.e. interactions after a communication breakdown, and the feedback following it, may lead to comprehensible input which is absolutely essential for language acquisition

Furthermore, Long (1996), argues that the interaction and the feedback learners receive on their erroneous output highlight the forms (grammar, vocabulary etc.) that are difficult for them to learn by the use of focus on form or focus on meaning approaches. Moreover, they help learners notice the gap in their knowledge (the gap between the input they receive and their own output); which may lead to modified output i.e. they try to modify their output and improve their accuracy to make them more similar to the input they receive. This process; nevertheless, needs focusing on language forms during the interaction to draw learners' attention to some features of the input (form) and to help them compare their own output with the highlighted forms in the input (de la Fuente, 2006).

1.3 Output Production and Vocabulary Acquisition

Three arguments support the investigation of output hypothesis for vocabulary acquisition (de la Fuente, 2002). First, research suggests that (Laufer, 1998; Pica, 1994, cited in de la Fuente, 2002), vocabulary negotiation is a common feature of interactions between native speakers and non-native speakers of a particular language. A study by Mackey, Gass and McDonough (2000) indicated that during interactions between learners and native speakers, most of the feedback received by learners was related to lexical items. They concluded that negotiation of meaning mostly involved lexis. Second, according to Gass (1997, cited in de la Fuente, 2002, p.85), "L2 learners' selective attention focuses on specific identifiable units, vocabulary being the easiest part of the L2 to isolate." Third, during vocabulary output production done through interactions, some of the functions of output proposed by Swain (1995) are in operation. The noticing function, for instance, may operate in lexical output production. de Bot (1996) also believed that one of the functions of output is that it may be helpful in turning declarative knowledge into procedural one which may be in operation in lexical output production as well. This means that by producing lexical output, learners may be able to send the vocabulary items into their active domain. Despite these findings, the role of producing lexical output in second language learning compared with that of comprehensible input and corrective feedback is not yet clear.

Thus, in the present study, a comparison between teaching words through mere comprehensible input and through comprehensible input plus pushed output and corrective feedback was made in order to measure the effects of pushed output and feedback given to learners on the receptive acquisition of new L2 words.

More specifically, building on earlier studies, this study was conducted to examine the idea of whether lexical output production and corrective feedback received in cases of lexical breakdowns, may lead to a better vocabulary acquisition; and if so, which one (output or feedback) explains the improvement in vocabulary acquisition. To test this idea, a comparison between the effects of output production and feedback was made through measuring the correlation coefficient between the amount of feedback given to an individual word, and the number of correct responses given to its corresponding item in the post-test. Furthermore, the correlation between the amount of feedback an individual learner received and his performance in the post-test was measured. Knowing the fact that all the learners (in the output production group) produced output (one written sentence) for each individual word, one could easily measure the effects of feedback given to learners by using the correlation coefficient method. In other words, it could rationally be argued that, since the amount of output was equal for each learner, this sought to investigate whether the differences among the individuals within the experimental group (if any) could be attributed to the provision of corrective feedback in the experimental group.

2. Review of Literature

In output hypothesis, Swain (1985, 1995) believes that there are important roles for output in second language acquisition. She contends that comprehensible input is necessary, but not sufficient for L2 acquisition and learners need to produce language in order to "move from semantic processing involved in comprehension to syntactic processing needed for production" (Nassaji & Fotos, 2011).

Swain (1993) stated three functions of output in language acquisition, i.e., noticing the gap, hypothesis testing and metalinguistic functions.

In the first function i.e. noticing, when learners try to produce something, they may find themselves unable to say what they really want to. In other words they *notice* a gap in their linguistic knowledge. According to Swain (1995), when this happens, learners will become more aware and conscious of those gaps and consequently focus on them more, and finally this may contribute to acquisition.

Hypothesis testing is the second function of output. According to Swain (1995), when learners want to say something, they make certain hypotheses about how to express that in second language. They actually test their hypotheses on the concepts they have formulated in L2 when they try to produce something in second language. If they are not successful in saying what they intended to say, they reject that hypothesis and test another one, i.e. they use another way to express the same meaning. In other words they try to find a solution for the breakdown in their communication by modifying their original output. Swain (1995, p. 126) contends that "erroneous output can often be an indication that a learner has formulated a hypothesis about how the language works, and is testing it out."

The third function of output, according to Swain (1995), is its metalinguistic function. This means that by producing output, learners will be able to consciously reflect upon language and will be aware of their problems. This helps them decide what they need to learn in their L2.

Nassaji and Fotos (2011) stated some other functions for output in second language acquisition. They believe that output promotes fluency, provides students with feedback and also improves their communication strategies. de Bot (1996) also believes that output can enhance acquisition by turning declarative knowledge (knowledge about language) into procedural knowledge (knowledge about how to use language).

Nation (1990) contends that in L2 vocabulary acquisition, learning starts from receptive knowledge (input) and progresses to productive knowledge (output). According to Laufer (1998), acquiring the productive knowledge (active knowledge of a word) is more complex than the passive or receptive knowledge. Laufer (1998) believes that due to the lack of tasks and exercises about new L2 words, learners' passive vocabularies develop more than active vocabulary knowledge, and if students are not pushed to produce the language or use the new words in their speech or writing, the words may never come into their active domain.

In a study conducted by Ellis and He (1999), the effects of premodified input, interactionally modified input, and modified output on the acquisition of receptive and productive knowledge of new L2 words were investigated. The results of the study indicated that the modified output group outperformed either of the input groups in terms of receptive and productive knowledge of words. It has also been found that there was no difference between premodified input and interactionally modified input groups.

However, Ellis, Tanaka and Yamakazi's study (1994) displayed different results. The article investigated the effects of interactionally modified input, premodified input and meaning negotiation (interaction while producing output) on the vocabulary acquisition of Japanese high school students of English. The study suggested that interactionally modified input has a better effect on comprehension and vocabulary acquisition than premodified input. Also negotiation of meaning does not result in more comprehension and acquisition of words than interactionally modified input. The results of this study are contrary to the results reported by Ellis and He (1999).

de la Fuente (2002) investigated the effects of three conditions on L2 vocabulary comprehension and acquisition (receptive and productive) by L2 learners, non-negotiated premodified input, negotiation without pushed output and negotiation plus pushed output. The results indicated that negotiated interaction plus pushed output promoted receptive and productive acquisition of words. de la Fuente (2002) argued that negotiated interaction plus output did not promote receptive acquisition more than negotiation without output; however, it was more effective in productive acquisition of words. Overall, de la Fuente (2002) concludes that output is very important for the productive acquisition of lexical items.

Izumi (2002) investigated the comparative effects of visual input enhancement (an external attention drawing technique) and output (an internal attention drawing technique) on the learning of English relativization through reading tasks by adult ESL learners. In the study, Izumi addresses two questions: whether output production can enhance noticing of a form (in this case English relativization), and whether this noticing of form can have beneficial effects on learning of that form as compared with visual input enhancement. The findings of the study suggest that output production has indeed more beneficial effects on noticing the target forms than mere exposure to comprehensible input. Furthermore, the noticing induced by output production contributes to the learning of the form much more than the noticing induced by visual input enhancement.

In a replication of Izumi's study (2002), Russell (2014) compared the noticing effects of output production and visual input enhancement on the inductive learning of Spanish future tense among 55 students of Spanish. The study displayed similar results with that of Izumi's. The noticing effect of visual input enhancement was not comparable to the noticing effect of output on the learning of the specific form. In other words, output production and the noticing induced by it enabled learners to learn the form inductively; however, visual input enhancement did not have the same results.

As it is obvious from the literature, the number of studies on the effects of output production or the interactional feedback on vocabulary acquisition and retention is limited. Furthermore, the results of the previous studies are not completely consistent. For example, Ellis and He (1999) displayed that modified output was very useful for vocabulary learning, and that the group which produced output outperformed the group without any output. On the contrary Ellis et al (1994) suggested that the group produced modified output was not significantly different from the group with no output. It is apparent that the results of these studies are mixed; hence, conducting more research on this topic is quite warranted.

In the present study, the differential effects of comprehensible input and pushed output plus feedback on the receptive acquisition of L2 lexical items were investigated empirically. For this purpose, the participants who were at the elementary level were randomly assigned to two groups. In the experimental group, learners were asked to produce the target language which led to interactions between the teacher and the participants in case a linguistic problem occurred. This interaction could result in giving feedback to learners. In the control group, learners received only input and they were not asked for any kind of output (oral or written); therefore, no interaction happened between the researcher and the students. The differential effects of each condition on the receptive acquisition of the target words were investigated empirically afterwards. Furthermore, a comparison was made between the effectiveness of output production and feedback students received within the experimental group. For this purpose, the experimental group was divided into two groups of high and low feedback receivers based on the amount of feedback each individual learner received. In other words, since there were 25 target words in the study, learners who received feedback for one to thirteen words in the treatment session, were assigned to low-feedback receivers; and those who received feedback for more than thirteen words to twenty five words were assigned to the high-feedback receiver group. Based on these conditions, this study was designed to answer the following questions:

1. Are there any significant differences among the performances of the groups under three conditions? (a) the comprehensible input condition in the control group (b) the low feedback receivers in the experimental group (c) and the high feedback receivers in the experimental group.
2. Do pushed output and corrective feedback following that (the condition in the experimental group) have a more beneficial effect on the receptive acquisition of vocabulary items than comprehensible input?
3. Which factor (output production or corrective feedback) has a more positive effect on receptive vocabulary acquisition?
4. Is there any correlation between the amount of feedback an individual learner received and his performance in the post-test?

5. Is there any correlation between the amount of feedback given for an individual word and the number of correct responses given to its related item in the post-test?

Research hypotheses:

Hypothesis one: There is a difference among the performances of the groups in the post-test in the three conditions mentioned.

Hypothesis two: Pushed output and feedback have a more positive effect on the receptive acquisition of vocabulary items in comparison with mere exposure to comprehensible input.

Hypothesis three: There is no difference between the effects of output production and corrective feedback on the better performance of learners in the post-test.

Hypothesis four: There is no correlation between the amount of feedback an individual learner received and his performance in the post-test.

Hypothesis five: There is no correlation between the amount of feedback given for an individual word and the number of correct responses given to its related item in the post-test.

3. Method

3.1 Participants

Thirty L1 Persian EFL learners participated in this study. They were homogenized in terms of language proficiency level. Their ages varied from thirteen to sixteen years old. The participants (N= 30) were chosen from a population of fifty male learners at the beginning level at the Iran Language Institute (ILI). Identification of their proficiency level was done based on the Total Placement Test published by Pearson Education (2006). They were required to complete this test two weeks before the administration of the pre-test. Learners whose scores were within one standard deviation above and below the mean score were chosen for participation in the study. Subsequently, they were randomly assigned to the two groups of the study.

3.2 Instruments

In this study, the Total Placement Test was used to select a homogenized group of participants out of fifty L1 Persian EFL learners who were studying at the beginning level. A thirty-item pre-test which was designed and made reliable by the researchers, was given to the participants in order to measure their lexical knowledge of the 30 selected target words that were used in the study. To see how reliable the test is and identify poor items of the test, if any, prior to the administration of the pre-test, a pilot study was carried out, the results of which showed that there were five poor items in the pre-test. The poor items were removed, and as a result of that, twenty five items remained for our investigation. Fifty EFL students took the pre-test for pilot-testing. The reliability of the test was measured after the omission of five items from the test. The reliability was measured by KR-21 method, since the test was measuring vocabulary knowledge alone and it had internal consistency. The reliability of the pre-test was estimated as 0.89. During our treatment sessions, participants in both groups received input related to the words. The experimental group (pushed and feedback group) was also asked to write sentences (output production) with the target words. Thus, three activities were carried out in the treatment sessions. They included the participants' production of written output, and if necessary, interaction between the researcher and each participant followed by the researcher's provision of feedback in response to any potential language error. After the treatment sessions, the learners in both groups were asked to do some fill-in-the-blank exercises regarding the words they had just been presented. In these exercises, learners were asked to complete some sentences with the new words they had just been presented. The words which had to be put in the blank spaces were given to the learners in a separate list so this task is regarded as a kind of recognition task because learners were only required to identify the correct word for each sentence and not to produce any written form. Finally, a post-test was given to all of the participants in order to measure their ability in retention of the words. The pre-test administered earlier, was given to the participants without any changes in its form as our delayed post-test. The reason for this is that the time interval between the tests was rather long. The only difference between the pre-test and the post-test was that the distribution of the correct choices was changed in the post-test.

3.3 Procedure

The participants (N= 30) were randomly assigned to two groups, a control group which received the comprehensible input about the words, and an experimental group which received input and were asked for output production. If there were any problems in their output, an interaction would arise between the researcher and the participants, and as a result of that learners would receive some feedback from the researcher.

A pre-test, made by the researcher, was given to the participants of the study in order to determine if the target words were unknown to the participants prior to the treatment sessions.

In the treatment session, 25 selected target words were presented to the two groups. In the control group, participants only received input about the words. The teacher would read each word aloud several times and provide students with appropriate definitions and examples. Then the participants were required to carry out some recognition fill-in-the-blank exercises. Overall, twenty five fill-in-the-blank sentences were completed by the participants. In the experimental group, students received the same input and were asked to produce language with the target words, and finally did the same exercises. In cases of any language problems in their output, the researcher and the participants would interact with each other (immediately after a problem was noticed) which would result into giving feedback to the participants via

clarification request, elicitation or sometimes recast which would always result in learners' production of modified output. The feedback would be given to students in cases of an error in their output; hence, there were chances that some participants whose output was correct didn't get any feedback from the researcher. Furthermore, the amount of feedback given for the words differed from one to another. Knowing about this condition, one may wonder whether the improvement and better performance of the experimental group; if any, was due to the effects of output or feedback. For this reason, the researcher divided the experimental group into two groups of low feedback receivers and high feedback receivers. Knowing that each participant in the experimental group produced an equal number of written output (one sentence) which was held constant between all participants, it was rationally concluded that the reason for the variety of participants' performance within the experimental group could be due to the differential extent of feedback learners received. Consequently, a within group comparison between the low feedback receivers and high feedback receivers was made to see the effectiveness of feedback on students' performance.

Exposure time is considered as an intervening variable which was controlled in this study. Both groups were exposed to the instructions equally, i.e. the number of exposure hours for both groups was the same. The reason for this is that longer exposure may lead to better performance in the post-test; consequently the data would be misinterpreted.

Finally, one week after the treatment sessions, a post-test was given to the students in order to measure their ability in receptive vocabulary acquisition.

3.4 Data analysis

An independent sample t-test was carried out before the administration of the treatment sessions in order to compare the mean scores of the pre-test of both groups of the study. This would clearly show us if our two groups had any significant differences in their knowledge of the target words of the study.

A one-way ANOVA was used in order to determine whether there were any significant differences among the three groups after the treatment sessions; the comprehensible input group, low feedback receivers and high feedback receivers. The Tukey HSD test was used as the post-hoc analysis to determine where these differences could lie. This test could provide answers for our research questions one, two and three.

The correlation between the amounts of feedback each participant received throughout the treatment sessions and his overall performance in the post-test was measured through the Pearson formula. This measurement also displayed if feedback as opposed to output alone could play a greater role in participants' enhanced performance.

Also, the correlation between the amounts of feedback given for a specific word throughout the treatment sessions and the overall correct responses given to the word's related item in the post test was estimated through the Pearson formula. It can vividly show if feedback, in comparison with output production, can be more helpful in receptive vocabulary acquisition.

4. Results

The results of the between group pre-test indicated that the target words were unknown for the control and experimental groups before the treatment sessions. The mean scores of the experimental group and the control group are 6.06 and 6.2 respectively. The descriptive statistics of each group test scores are presented in Table One.

Table 1. Descriptive Statistics for the Experimental and the Control Groups' Pre-test

	N	Mean	Std. Deviation	Minimum	Maximum
Experimental Group	15	6.06	1.53	4.00	9.00
Control Group	15	6.2	1.65	4.00	9.00

As displayed in Table One, the performances of both groups were nearly the same. The descriptive statistics show that there is really not much difference between both groups' performances in the pre-test, and that both groups had little knowledge of the words. This is supported by the nearly equal low mean scores obtained from both groups.

In Table Two, the results of the independent sample t-test also support the claim that there was no significant difference between the two groups of the study.

Table 2. Independent Sample T-test for the Pre-test

	T	df	Sig. (2-tailed)	Mean Difference
Equal Variances assumed	-0.22	28	.82	-0.13

Note. The mean difference is not significant at the .05 level.

The result of the t-test shows that the P-value (0.82) obtained in the t-test is much bigger than the alpha level, ($p > .05$). This indicates that the groups did not have any significant differences in their performances in the pre-test which supports the claim that their knowledge of the selected target words was almost the same.

The participants of the study within the experimental group have been divided into two groups of low feedback receivers (8 students) and high feedback receivers (7 students) based on the amount of feedback each individual learner

received. A one-way ANOVA test for comparing the mean scores of these three groups, comprehensible input group, low feedback receivers and high feedback receivers was conducted in order to determine if there were any significant differences among the groups after the completion of the treatment sessions. Table Three indicates the results of the one-way ANOVA test for the three groups.

Table 3. One Way ANOVA for the Three Groups of Comprehensible Input, Low Feedback Receivers and High Feedback Receivers (post-test)

	Sum of squares	Df	Mean square	F	Sig.
Between Groups	334.811	2	167.405	8.464	.001*
Within Groups	533.989	27	19.777		
Total	868.800	29			

Note. *.The mean difference is significant at the .05 level. $F(2, 27) = 8.464, p > .05$

The results of the one way ANOVA indicates a statistically significant difference among our three groups in the post test ($p=0.001$). The results of the one way ANOVA provide an answer to research question one, i.e. there was a significant difference among these three groups after the treatment sessions.

In Table Four, the Tukey test (as a post-hoc analysis) shows which group's performance is significantly different in the post test.

Table 4. Multiple Comparisons of the Three Groups through Tukey HSD

(I) groups	(J) groups	Mean Difference (I-J)	Sig.
low-feedback	high-feedback	-5.94643*	.040*
	Control	2.42500	.437
high-feedback	low-feedback	5.94643*	.040*
	Control	8.37143*	.001*
Control	low-feedback	-2.42500	.437
	high-feedback	-8.37143*	.001*

Note. *. The Mean difference is significant at the 0.05 level.

The multiple comparisons of groups in Table Four clearly show which groups made the difference significant. The results of the Tukey post-hoc test display that the high-feedback group is significantly different in the post test from the low-feedback group ($p= 0.04$) and the control group ($p= 0.001$); however, the low-feedback group and the control group are not statistically different from each other ($p=0.43$). Table Five displays descriptive statistics of the post-test for our three groups.

Table 5. Descriptive Statistics for the Three Groups

Groups	Minimum	Maximum	Mean	Std. Deviation
Low-feedback	10.00	22.00	15.625	4.627
High-feedback	19.00	24.00	21.571	1.988
Control	5.00	23.00	13.200	5.073

Note. High-feedback group (Mean= 21.57, SD= 1.98)

The results displayed in Tables Four and Five reveal that the mean difference between the high-feedback group and the low-feedback group is statistically significant; and that the high-feedback group outperforms the low feedback and the control group. The results of one-way ANOVA, Tukey post-hoc test and Table Five, signify that the group which received more feedback outperforms the other groups of the study (low-feedback group and control group).

Furthermore, the results of the t-test for the experimental (low feedback+ high feedback) and the control groups (Table Six & Seven) indicate that the experimental group outperforms the control group in the post-test.

Table 6. Descriptive Statistics for the Control and Experimental Groups

Groups	N	Mean	Std. Deviation
Experimental	15	18.400	4.672
Control	15	13.200	5.073

Table 7. T-test for the Control and Experimental Groups in the Post-test

	t	df	Sig. (2-tailed)	Mean Difference
Equal variances assumed	2.92	28	.007	5.20*

Note. *. The mean difference is significant at the .05 level.

The results indicate that the experimental and control groups are statistically different in the post-test ($p < .05$). Also, the mean score of the experimental group is 18.4 while for the control group this score is equal to 13.2. Hence, it can be concluded that the experimental group, i.e. the group which produced output and was given feedback outperformed the group which received comprehensible input only. As a result, our second hypothesis is supported statistically.

The results of the Tukey post-hoc test suggest that the high-feedback and low-feedback groups are significantly different from each other. It should be noted that the condition of these two groups was nearly identical, i.e. both groups received input, did some recognition fill-in-the-blanks exercises, and produced the same amount of output, all in equal periods of time; however, the amount of feedback given to learners of these groups was not equal. Rationally, it can be concluded that the significant difference between them and the better performance of the high-feedback group might be due to the positive effects of feedback. Hence, it may be possible to state that feedback plays a more significant role in the enhanced performance of the experimental group than output. These findings provide an answer to the third research question and reject our null hypothesis.

So far, the superiority of feedback over output has been indicated through the Tukey post-hoc test. However, in the present study, one research question addresses the issue if the amounts of feedback could have a correlation of any kind with each learner's score in the post-test and also with the number of correct responses given to a word's related item in the post-test. For this purpose, the correlation between the amounts of feedback given to each learner, and his score in the post-test was measured through the Pearson Formula. Table Eight displays the results.

Table 8. Pearson Correlation between the Amounts of Feedback Given to each Learner and his Score in the Post-test

		feedback	posttest
feedback	Pearson Correlation	1	.747**
	Sig. (2-tailed)		.001
	N	15	15
posttest	Pearson Correlation	.747**	1
	Sig. (2-tailed)	.001	
	N	15	15

Note. **. Correlation is significant at the 0.01 level (2-tailed).

The results of the Pearson correlation show that there is a positive correlation (.747) between the amounts of feedback given to each individual learner and his performance in the post-test. In other words, the more feedback they received, the better results they gained in the post-test. Hence, our fourth hypothesis (null hypothesis) is rejected.

Furthermore, the correlation between the amounts of feedback given for a specific word and the number of correct responses given to its corresponding item in the post-test was measured through Pearson formula.

The results displayed in Table Nine shows a positive but not a rather strong correlation between the feedback and the correct responses given to a specific word. These findings suggest that feedback plays a more important role in learning the vocabulary items than output. Feedback has a positive correlation with the performance of each participant in the post-test, and also with the total numbers of correct responses given to a word's item in the post-test.

Table 9. Pearson Correlation between the Amounts of Feedback Given for a Word and the Number of Correct Responses given to its Corresponding Item in the Post-test

		feedback	Correct responses
Feedback	Pearson Correlation	1	.594**
	Sig. (2-tailed)		.002
	N	25	25
Correct responses	Pearson Correlation	.594**	1
	Sig. (2-tailed)	.002	
	N	25	25

Note. **. Correlation is significant at the 0.01 level (2-tailed).

5. Discussion

In the present study, the comparative effects of output, feedback, and comprehensible input on the receptive acquisition of L2 vocabulary items were investigated empirically. The results of the study indicated that the group which produced output, and if necessary received feedback from the researcher outperformed the group which only received comprehensible input in its performance in the post-test. Besides, and more importantly, the findings suggest that corrective feedback is more effective than output in the students' enhanced performance in the post-test, i.e. corrective feedback is more responsible for this improvement than output alone. Also, a positive correlation was found between

the amount of corrective feedback a learner received and his overall performance in the post-test which itself substantiates the superiority of feedback over output. By the same token, a rather less strong positive correlation was found between the amount of corrective feedback given for a word and the number of correct responses given to its corresponding item in the post test.

The first research question was concerned with whether there was a significant difference among the three groups of the study, comprehensible input group, low-feedback receivers and high-feedback receivers in the experimental group. The results obtained from the one-way ANOVA and the Tukey post-hoc test revealed that the high-feedback receivers had significant differences with the low-feedback and the control group. However, the low-feedback group and the control group didn't have any significant differences. On the other hand, the results of the independent sample t-test indicated that the experimental group (low-feedback and high-feedback receivers) outperformed the group which only received input, i.e. they obtained more receptive knowledge of the new words. The reason for this may be relevant to the positive roles output, feedback and modified output could play in language learning. As Swain (1993) puts it, output has three important functions in second language acquisition, noticing the gap, hypothesis testing and metalinguistic function. The noticing-the-gap function suggests that when learners try or are pushed to produce output, they notice the gap in their knowledge, i.e. they notice that they cannot say what they intend to say. When this happens, learners pay more attention to the input they receive to remove the gap in their linguistic ability. Swain (1985, 1995) believes that this noticing can improve language acquisition. She contends that output plays a very significant role in language learning; and input, although very necessary, is not enough for the acquisition of language.

Swain (1985) believes that when learners are pushed to produce output and modified output they may move from semantic processing to syntactic processing. In comprehension, semantic processing is involved. According to Swain, learners can take advantage of the top-down strategies, their background knowledge and context in order to comprehend something; however, in producing output syntactic processing is involved; learners have to pay attention to the means of expressing something. These arguments may only account for a part of the experimental group's better performance in the post-test; however, the results show that within the experimental group, those who received more corrective feedback performed much better than others with lower amount of feedback. Hence, the high-feedback receivers outperformed the control group, and even its counterpart, the low-feedback receivers. Consequently, it may be rational to conclude that in spite of all the arguments for the effectiveness of output, feedback has a greater responsibility for the enhanced performance of the experimental group than output. In order to know the reason behind this phenomenon let's review what happened in the experimental group.

The participants of this group were asked to produce output after being exposed to comprehensible input. Their output was in written form. In cases of noticing any problems (especially lexical problems) by the researcher, an interaction would arise between the participant and the researcher through which some feedback in the form of clarification request would be given to the learner which would result in modified output.

Results of this study suggest that those learners who produced output and received corrective feedback were engaged in both of the semantic processing and syntactic processing. According to Cook (1991), when learners are pushed to produce output, and modify their output after having an interaction and receiving feedback, they are moving into a deeper level of processing, which are decoding and code-breaking. In the decoding stage, they have to understand the meaning of the word while negotiating for meaning. In the code-breaking stage, learners have to focus on the form to produce it in the desirable and acceptable way. This is consistent with the noticing hypothesis proposed by Schmidt (1990) which postulates that a form (lexical, grammatical, phonological, and pragmatic) cannot be acquired, unless it is noticed by the learners. Swain (1995) believes that producing output can facilitate the code-breaking ability of students, and this is very essential for acquisition. The question which still remains in mind is that what makes such a significant difference between high-feedback receivers and low-feedback receivers. The answer might be relevant to the superior effects of the corrective feedback they received. As it was stated before, output and interactional feedback are among the different attention drawing techniques. Attention and awareness are regarded as two cognitive processes that through interaction mediate input and second language learning (Gass, 1997; Long, 1996; Philip, 2003; Robinson, 2003). As Long (1996) puts it, negotiated interaction and interactional feedback are useful attention drawing techniques that can draw learners' attention towards a gap between their own output and the target or expected language form. Furthermore, feedback given to learners through interactions, provide them with opportunities to modify their own output (Swain, 1998, 2005). In other words, the feedback learners received through interaction focuses their attention on the parts of the input that are productively and receptively problematic for them. Hence, it may be true to state that interactional feedback given to learners in the experimental group plays some more roles in the students' better performance than output. As Ellis (2013) stated, one of these roles is that, unlike output, feedback can be input-providing, i.e. it can expose learners with the correct target forms. This input-providing role may have a noticing effect which can increase the saliency of those aspects of the input that were problematic for the learners. As Schmidt (1995, 2001) and Robinson (2001, 2003) argued, noticing is a very crucial factor in turning input into intake. Feedback can also be output-prompting, which means that feedback may push learners to self-correct and modify their own output. According to Lyster (2004), feedback, particularly clarification request "withhold correct forms and instead offer learners an opportunity to self-repair by generating their own modified response" (p. 405). The two roles mentioned for feedback might account for the enhanced performance of the experimental group, and specifically, the high-feedback receivers in comparison with the low-feedback receiver and the control group.

So, what distinguishes high-feedback receivers and low-feedback receivers from each other is that in the former, learners focused more on the lexical items and the way they are produced as a result of the interactional feedback they received. The low-feedback receivers may not have paid the same amount of attention to our target forms. This might be accounted for by the information processing model proposed by McLaughlin, Rossman and McLeod (1983). They distinguished between two processing mechanisms, controlled and automatic processes. Controlled processes are limited in capacity, while automatic processes are permanent and not limited. Controlled processes are like learning something new (a new skill) in which only a few aspects of it can be paid attention to (Brown, 2007). Hence, McLaughlin et al. (1983) thinks of learners as processors who have limited capacity and cannot notice all elements or aspects of the input (new information) simultaneously. That's because it is controlled at this stage.

When learners are asked to produce output with our target words, they focus on those specific forms (lexical forms) and when they receive interactional feedback on their language errors, they even pay closer attention to those forms. According to McLaughlin et al. (1983), our limited capacity does not let us pay attention to all forms at a given time. Consequently, the forms which have been paid more attention to are acquired better.

The fourth and fifth research questions were concerned with whether there was a correlation between the amounts of feedback given to each learner and his overall performance in the post-test; and also between the amounts of feedback given for each word during the treatment sessions and the numbers of correct responses given to its related item in the post test. The results indicated a positive correlation in both cases. While the reason for this positive correlation can be found in all the explanations given above for the better performance of the high-feedback receivers, there may be other reasons for the presence of this positive correlation.

The feedback given to learners in the experimental group was simple clarification request. It was given to learners "in an atmosphere of support and warm solidarity" (Ur, 1996, p. 255). This might have increased learners' motivation rather than being considered as punishment or embarrassment for students. Besides, from the sociocultural theory (SCT) point of view, feedback is important for learning, since it helps learning to be scaffolded in social interaction and linguistic forms to be internalized (Aljaafreh & Lantolf, 1994).

This empirical study provides evidence that producing output and receiving interactional feedback facilitate the receptive acquisition of words; however, corrective feedback can play a more significant role in vocabulary learning. These results are in conformity with Swain's (1995) ideas about the positive effects of output on language acquisition, the idea which is in contrast with Krashen's (1981) views that speaking and writing (output) are the signs of learning, i.e. if you are able to speak and write, this shows that you have successfully learned the language. Krashen believed that output is not a cause of learning.

In this study it has been observed that output, and more importantly, feedback do in fact affect word receptive acquisition positively.

The results of this study are consistent with those of Ellis and He (1999). They compared the effects of premodified input, interactionally modified input and modified output on the acquisition of both receptive and productive knowledge of new vocabulary items. The results indicated that the modified output group performed better than the other two groups in receptive and productive acquisition of vocabulary items. In the present study; however, the effects of output and corrective feedback on the receptive acquisition of new L2 lexical forms have been investigated. The motive behind our study was to examine the differential effects of comprehensible input, output and corrective feedback on vocabulary acquisition. In other words, if output production and interaction facilitate receptive knowledge of words, which one can be more responsible for this enhanced performance?

de la Fuente (2002) also investigated the comparative effects of premodified input, negotiation without pushed output, and negotiation plus pushed output on receptive and productive acquisition of vocabulary items. The results were quite interesting. She found that negotiation plus pushed output and negotiation without pushed output promoted the receptive acquisition of words equally; however, for the productive acquisition, negotiation plus output was more effective than the other conditions.

In another study, Mackey and Philip (1998) examined the effect of recasts on question forms development. In their study, learners who were studying at intermediate and advanced levels were asked to complete three information gap tasks. In the experimental group, learners received recasts in cases of problems in their utterances. However, in the control group, learners didn't receive any feedback while doing the same tasks. The findings of the study indicated that learners who received recasts as corrective feedback produced more correct question forms in the post-test.

Han (2002) also supported the positive roles of corrective feedback in enhancing second language knowledge. He concluded that in language classes, meaning focused tasks are not sufficient for language development, and the existence of teachers' intervention through focusing on forms and corrective feedback is necessary.

The effective role of interaction in which corrective feedback was given to learners, was also analyzed in a study by Shahraki & Kassaian (2011). In their study the effect of negotiated interaction on receptive and productive vocabulary acquisition was investigated. The findings of the study indicated that interaction and productive use of words lead to a development in receptive and productive knowledge of words.

This study, along with few similar studies conducted in the same area (de la Fuente, 2002; Ellis and He, 1999; Mackey and Philip, 1998; Mackey and Silver, 2005; Shintani, 2013); suggest that English teachers need to give a special role to output and specifically corrective feedback (clarification request) in their teaching programs. Overall, this study has two

important implications. The first one concerns with the positive effect of output and corrective feedback on receptive acquisition of L2 words. And the second implication, as far as the results of the present study is concerned, emphasizes the superiority of corrective feedback over output on the receptive acquisition of vocabulary items.

6. Conclusion

In the present study the effectiveness of output production and its positive role in the receptive acquisition of L2 new vocabulary items were displayed. Learners who were encouraged to produce written output for each vocabulary item could recognize more words than learners who didn't produce any output. Furthermore, corrective feedback was displayed to be more effective than output production in improving learners' receptive knowledge of vocabulary items. In other words, students who received feedback on their erroneous output, showed better learning of L2 words. It can be concluded that corrective feedback not only promotes receptive acquisition of words, but also can be more effective than output in second language learning. As a result, language teachers should not downplay the positive roles of feedback, particularly in the area of vocabulary learning.

6.1 Suggestions for Further Research

In the current study, the comparative effects of comprehensible input, output production, and corrective feedback on the receptive acquisition of vocabulary items were investigated. The effectiveness of the three conditions mentioned can also be investigated for productive acquisition of L2 vocabulary items both in the short-term and long-term periods. Furthermore, the differential effects of output production, comprehensible input, and feedback can be examined in terms of the acquisition of other language forms, such as phonological aspects of language, collocations, phrasal verbs and idioms, and even pragmatics.

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