Oral Pushed Output: The Route to Long-term Grammatical Accuracy

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Abstract
This study investigated the impact of oral pushed output on the learning and retention of English perfect tenses. During the study, a pre-test was administered to 22 freshmen majoring in English translation. The participants were randomly assigned to two groups. Then, for six sessions both groups received explicit instructions on English perfect tenses. Every session, the experimental group recorded their oral performances on some picture description and translation tasks whose completion entailed the use of the instructed language form, while the control group merely did some conventional multiple choice tests covering the instructed structures. Following the treatment sessions, a post-test was run. Four weeks later, a delayed post-test was also administrated. Analysis of the data through repeated measures Analysis of Variance (ANOVA) supported the facilitative effects of oral pushed output on the learning and retention of English perfect tenses. The finding of the study can have some implications for English Language Teaching (ELT) materials developers and practitioners.

Keywords: grammatical accuracy, interlanguage development, oral channel of communication, perfect tenses, pushed output

The development of grammatical accuracy in a second language is a multifaceted process which is affected by several factors whose importance is the subject of heated debate among Second Language Acquisition (SLA) researchers. Some scholars (e.g. Krashen, 1982,
1985) consider input to be the main factor in the development of grammatical accuracy, while others put greater emphasis on learners’ active involvement in the production of target language output (Mackey & Oliver, 2002; Mackey & Philp, 1998; McDonough, 2005; Skehan, 1998; Swain, 1985, 1991, 1993, 1995, 2005).

Studies of French immersion programs in Canada, where learners were exposed to perpetual and immense amount of target language input, indicated that although the learners eventually comprehended the target language the same as native speakers, and could speak fluently, their productive skills stayed “far from native like, particularly with respect to grammatical competence” (Swain, 1991, p. 98). Swain proposes that this is due to the lack of learner “output”. Swain (1995) theorizes that since the learners in immersion settings can convey their intended message without analyzing the target language grammar deeply, they are not “pushed” to pay attention to the target language form.

Studies comparing the impact of input-based instruction with that of output-based instruction have yielded mixed results. Presumably, the effects of these two modes of instruction depend on different factors one of which could be the channel of output production. Oral channel of production has some features that are distinct from those of written channel. From cognitive perspective, the process of oral production includes four stages of conceptualization, formulation, articulation, and self-monitoring (Levelt, 1989) whereas in producing written output the articulation involves grapho-motoric and orthographic performance too. This seems to make writing process cognitively more demanding (Bourdin & Fayol, 2002; Grabowski, 2005). On the other hand, due to the transitory nature of speech, compared to written language, possibility of self or teacher-monitoring for the purpose of improving is limited and therefore it is believed that oral pushed output activities cannot provide the needed learning opportunities (Bygate, 2006). However, the present study investigates the short and long-term effects of oral pushed output on the interlanguage development of Iranian EFL learners in terms of English perfect tenses. The selection of English perfect aspect was on the
ground that, as Larsen-Freeman, Kuehn, and Haccius (2002) point out, the English verb tense-aspect system is among the grammatical areas where ESL/EFL learners find difficult to master. Iranian EFL learners are no exception. The findings of Farrokh (2011) indicate that tenses are among the most common problems of Iranian EFL learners. They usually confuse tenses and substitute one tense for the other. Furthermore, the fact that Persian language lacks future perfect tense and Persian speakers use present perfect tense instead of future perfect (Jabbari, 2004), intensifies the problem and puts perfect tenses among the problematic forms for Iranian EFL learners.

Literature Review

Current perspectives on SLA emphasize the significance of learners’ L2 output in the process of language learning, proposing that for effective second language learning to take place through instruction, the presence of comprehensible input, focus on form, as well as focus on active production of linguistic output is indispensable and that exposure to an input-rich environment is vital but not sufficient for successful second language learning. In this regard Ellis (2014), in his specification of the principles of instructed second language learning, reiterates the importance of learner output arguing that “Successful instructed language learning also requires opportunities for output” (p. 39).

The importance of learner output was first conceptualized by Swain (1985) and led to her output hypothesis. Output hypothesis (Swain 1985, 1991, 1993, 1995, 2005) holds that “the act of producing language (speaking or writing) constitutes, under certain circumstances, part of the process of second language learning” (Swain, 2005, p. 471). Swain stipulates that for successful SLA, learners should be pushed to produce both written and spoken forms with an emphasis on linguistic accuracy. She argues that production of pushed output by L2 learners can stretch their interlanguage and help them develop their grammatical competence. The term “pushed” means being obliged to perform beyond ones’ normal comfort level (Nation, 2011) and “pushed output” refers to the type of
output that “reflects what learners can produce when they are pushed to use target language accurately and concisely” (Ellis, 2003, p.349).

The functions of pushed output, as put by Swain (1985), are "to provide opportunities for contextualized, meaningful use, to test out hypothesis about the target language, and to move the learner form a purely semantic analysis of the language to a syntactic analysis of it" (p. 252). More specifically, pushed output can lead to learners’ hypothesis forming and testing, noticing, automaticity/fluency and metalinguistic awareness (Swain, 1985).

Concerning the first function, Swain (1995) argues that output, mainly incorrect output, can be a sign of hypotheses formulated by the learner concerning the way target language works, and also a sign of learner’s attempt to test those hypotheses. As learners become familiar with some new linguistic forms, they might try them out in their own written and oral pushed output and in some occasions their output leads to a kind of feedback that makes them aware that their output is inaccurate or inappropriate. In such cases the learners utilize the feedback to modify the hypotheses they hold concerning those rules and the way target language works.

With regard to noticing function, Swain (1995) points out that “in producing the target language (vocally or sub-vocally) learners may notice a gap between what they want to say and what they can say, leading them to recognize what they do not know, or know only partially” (pp. 125–126). In this regard Schmidt and Frota (1986, p. 311) claim that “a second language learner will begin to acquire the target like form if and only if it is present in comprehended input and ‘noticed’ in the normal sense of the word, that is consciously”. Later Schmidt (1990, 1993) in his Noticing Hypothesis reiterates that noticing is a prerequisite to the acquisition of target language forms.

Regarding metalinguistic function, Swain (1997, as cited in Shehadeh, 2005) argues that when learners think about their L2 use, their linguistic outputs function meta-linguistically and help them deal with linguistic knowledge. Along the same lines, Swain and Lapkin (1998)
argue that production of output makes learners think about the language through discussion of language forms, which they call “language related episodes”. This linguistic awareness helps learners concentrate on the properties of the language itself which, in turn, can facilitate second language interlanguage development (Masny, 1991).

Pushed output can also help SLA through developing automaticity (Swain, 1985). Regarding the process of automatization and development of fluency in language learning, Anderson (1993) maintains that skills are first learned in the form of declarative knowledge which is later turned into procedural knowledge through practice, and finally automatized through additional practice. Therefore, steady and successful mapping of grammar to output can lead to automatic processing (Gass, 1997). In this regard Skehan (1998) agrees with Swain; however, he believes that this may be more related to some areas of language than to others. VanPatten and Cadierno (1993, p. 239), on the other hand, maintain that while producing output “learners need to develop their abilities in accessing the developing system for fluent and accurate production”, but they believe that production has no effect on the development of that system itself.

Pushed output can also function as generator of better input since during interaction the listener’s feedback concerning the incomprehensibility of the input makes the speaker reword his or her statements to fit the listener’s current proficiency level and this leads to better quality input (Skehan, 1998).

Supporting the positive effects of pushed output, Ellis (1993, 1994) proposes that learners’ production of linguistic output during form focused instruction can lead to the development of their formulaic, proceduralized, and implicit L2 knowledge. Output also provides learners with auto-input which is possible through learners’ attention to the input provided by their own productions (Ellis, 2003).

The role of output in SLA has been investigated quite extensively. The findings of a meta-analysis of 35 research projects on the effectiveness of comprehension-based instruction (CBI) versus production-based instruction (PBI) conducted by Shintani and Ellis
(2013) indicate that both (CBI) and (PBI) have large effects on receptive and productive L2 knowledge; however, this study indicates that (PBI) has greater long-term effects on productive knowledge of vocabulary.

A large number of output studies have focused on the functions of output including noticing (Izumi, 2002; Izumi & Bigelow, 2000; Izumi, Bigelow, Fujiwara & Fearnow, 1999; Mahmoudabadi, Soleimani, Jafarigohar & Iravani, 2015; Schmidt, 1990; Schmidt & Frota, 1986; Swain, 1995; Uggen, 2012; Wang & Castro, 2010), hypothesis testing (Swain, 1995), automaticity (Anderson, 1982; de Bot, 1996; Dekeyser, 1997; McLaughlin, 1987), grammatical monitoring (Izumi, 2003), and stimulating syntactic processing (de Bot, 1996).

Scholars involved in output studies have implemented different instruments and tasks to prompt output among which are 'think aloud' activities (Swain & Lapkin, 1995), stimulated recalls (Egi, 2008), focused communicative tasks (Nobuyoshi & Ellis, 1993), collaborative output tasks (Murray, 1992; Storch, 1998), story completion, and story sequencing (Mackey & Philp, 1998), problem solving (Muranoi, 2000), information gap activities (Leeman, 2003), picture description (Birjandi & Jafarpour Mamaghani, 2014; Foster & Skehan, 1996; Gilabert, 2007; Shehadeh, 2003; Tavakoli & Skehan, 2005), collaborative story sequencing tasks (Mackey & McDonough, 2000), jigsaw tasks (Swain & Lapkin, 2001), and dictogloss (Jabbarpoor & Tajeddin, 2013; Kowal & Swain, 1994; Swain & Lapkin, 1998, 2001).

The fact that so far the findings of output research have yielded inconsistent results with regard to the development of grammatical accuracy, plus the insufficiency of research concerning the effects of different types of output have created a gap in the realm of SLA studies which necessitates more exhaustive studies within the domain of output hypothesis. The stated need along with the renewed focus on language form inspired the researchers to conduct the present study with the purpose of investigating the efficacy of oral pushed output in the enhancement of Iranian pre-intermediate EFL learners’ grammatical
accuracy, and the retention of their acquired grammatical knowledge. To this end, the present study investigated the following questions:
1. Does Iranian pre-intermediate EFL learners’ oral pushed output affect their learning of English perfect tenses?
2. Does Iranian pre-intermediate EFL learners’ oral pushed output affect their retention of English perfect tenses?

Method

Participants
The participants in this study were male and female students aged between 18 and 22. They were selected from among 50 freshmen at the Islamic Azad University of Karaj, Iran, majoring in English translation and participating in a grammar course. In this faculty, both English and Persian are used as the medium of instruction and the students usually come from mixed backgrounds. It should be noted that the courses translation students should take during their freshman year are mostly general English courses and not related to translation. Therefore, the participants’ major would not affect their performances and the result of the study. To select homogeneous groups in terms of English proficiency level “Oxford Placement Test” (Allan, 1992) was administered and subsequently, the 22 students whose scores fell within the range of pre-intermediate level were selected as the participants of the study.

Instruments
Oxford Placement Test (OPT) (Allan, 1992) was administered as the first measurement to determine the homogeneity of the participants concerning their English language proficiency. The logic behind the employment of OPT was its objectivity, reliability and administrability. Moreover, Allen (1992) himself asserted that OPT has the capacity of being used with any number of students of English to determine the accurate place of ESL students at all levels.

Through the course of the study, three parallel grammar tests, namely Pre-test, post-test and delayed post-test were administered. They
were constructed by the researchers and were piloted with a group of freshmen whose language proficiency was close to that of the sample. The tests were planned to last 90 minutes each.

Being parallel, all three tests enjoyed an identical two-part structure, i.e., error correction and fill-in-the-blank items. The error correction section of the tests comprised 40 items each with one tense related error and the filling section included some sentences with blanks accompanied by the required verbs provided in parenthesis. The participants were to complete the sentences with the correct form of the verbs. Scoring of the tests was done by assigning one point for each correct and 0 point for each incorrect response.

To ensure that the pre-test, post-test, and delayed post-test were parallel, their content and item characteristics were meticulously checked and compared by the researchers and two other colleagues. To determine the construct validity of the tests employed in this study namely pre-test, post-test and delayed post-test of syntactic accuracy and OPT, a factor analysis through varimax rotation was carried out. The SPSS extracted only one factor as the underlying construct of the four measures employed in this study. This one-factor accounts for 57.44 percent of the total variance. Table 1 presents the summary of the total variance.

Table 1

<table>
<thead>
<tr>
<th>Comp</th>
<th>Initial Eigenvalues</th>
<th>Extraction Sums of Squared Loadings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total</td>
<td>% of Variance</td>
</tr>
<tr>
<td>1</td>
<td>2.298</td>
<td>57.448</td>
</tr>
<tr>
<td>2</td>
<td>.819</td>
<td>20.472</td>
</tr>
<tr>
<td>3</td>
<td>.624</td>
<td>15.608</td>
</tr>
<tr>
<td>4</td>
<td>.259</td>
<td>6.471</td>
</tr>
</tbody>
</table>

Since all of the tests loaded on a single factor, it can be concluded that they tapped on the same underlying construct. Moreover, they
enjoyed empirical validity because they loaded with the OPT on a single factor.

The tasks implemented during the course of the study were structured picture description tasks, taken from Hartmann, Esparza, and Zarian (1984) and adapted for the purpose of this study, and Persian to English translation tasks involving the instructed grammatical structures. These tasks were one-way, non-reciprocal tasks which, as Shehadeh (1999) points out, compared to two-way tasks, are more likely to put language learners in conditions to produce pushed output.

The use of picture description tasks can be justified by their frequent implementation in output studies (Foster & Skehan, 1996; Gilabert, 2007; Izumi & Izumi, 2004; Shehadeh, 2003; Tavakoli & Skehan, 2005) which can make the findings of this study comparable to the results of the studies employing similar tasks. Moreover, as put by Tavakoli and Skehan (2005) because of their non-interactive nature, picture description tasks can be better controlled and this prevents individual variation.

The use of translation tasks, on the other hand, is tenable on the ground that they have also been implemented in output studies (Kobayashi & Rinnert, 1992; Macaro & Masterman, 2006). Moreover, even traditional activities such as “translation, dictation, and rote memorization can be helpful in bringing attention to form” (Savignon, 2001; p. 20). In addition, translation tasks have the potential to prevent the use of avoidance strategy by language learners. Therefore, to compensate for the limitation of picture description tasks concerning their inability in elicitation of the instructed points, the use of translation tasks sounded inevitable.

In the construction of the tasks, necessary caution was exercised to ensure that they did not contain overly complex or subject-specific vocabulary and, when necessary, the required lexical items were supplemented, so as not to divert the participants’ attention to vocabulary considerations. It is worth mentioning that the required words were given parenthetically in the translation tasks and in picture description tasks they were glossed in the footnotes. Moreover, since planned Focus on
Form was intended, in the construction of the tasks the researchers did their utmost to elicit merely the intended structures.

In order to ensure that the tasks chosen for this study were suitable in terms of length and difficulty, a pilot study was carried out with a different class including students of more or less the same level of English proficiency as the participants of the main study. Subsequently, some modifications were applied to the tasks to gear them to the proficiency level of the participants.

**Procedure**

The quasi-experimental study was conducted during a whole semester. From among 50 freshmen majoring in English translation 22 students were selected as the participants of the study. The selection was based on their language proficiency level which was determined with reference to their scores in OPT (Allan, 1992) administered the first week of the semester. The scoring was carried out based on the user’s manual and the proficiency level of the participants was determined with reference to the levels chart which accompanies the test. Later, the participants were randomly assigned to two homogeneous groups. It should be noted that treatment sessions were held in four intact classes and the researchers studied the performances of only the homogeneous students. In other words, the participants were not separated from the rest of the class. During the following session the pre-test was administered to determine the learners’ entry behavior regarding the target structures. Over the succeeding weeks both groups were presented with explicit grammar instructions on the intended structures accompanied with sentence level practice exercises from their grammar course book “Understanding and Using English Grammar” by Azar (1999). The last 15 minutes of the class time in both groups was allotted to extra activities. During this time, each session the members of the experimental group were required to record their performances on two oral pushed output tasks (a picture description and a Persian to English translation task) which elicited the newly presented structures. To
prevent noise intrusion or distraction during data collection, the researcher required the students to record their voices using their hands free cell phone devices which contained head sets and microphones. The members of the control group, on the other hand, were asked to do 20 conventional multiple choice items related to the instructed structures during the same amount of time. Subsequently, both groups were provided with mainly explicit written teacher corrective feedback on their performances on the tasks and tests the succeeding week. The corrections addressed exclusively the tenses in focus giving the students metalinguistic awareness. The explicit written teacher feedback was given to each student individually and the common errors were also dealt with orally in the class. It is worth mentioning that, while the control group were given the same amount of time as the experimental group to be engaged in doing tense related tests, they were not required to produce any linguistic output. Therefore, both groups were exposed to the same instructional material, and the same type and amount of instruction, practice and feedback. What was different in the two groups was the nature of the end-of-the-class activities.

The treatment lasted for eight weeks and the week after the last session of the treatment, a post-test was given to the participants to determine the efficiency of the treatments and four weeks later a delayed post-test was administered to investigate the degree of the loss or gain regarding the learned structures.

In order to compare the experimental group’s performance on the pre-test, post-test and delayed post-test a repeated measures ANOVA was run. It should be mentioned that before running the ANOVA necessary caution was exercised to make sure that all assumptions of repeated measures ANOVA i.e., the assumptions of interval data, independence, normality and homogeneity of variances were met. The data were measured on an interval scale, and the assumptions of independence was met since none of the subjects participated in more than one group. The students’ scores on the pre-test, post-test and delayed post-test enjoyed normal distributions (see table 2).
Table 2

*Normality Test*

<table>
<thead>
<tr>
<th></th>
<th>Skewness</th>
<th>Kurtosis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Statistic</td>
<td>Std. Error</td>
</tr>
<tr>
<td>Pre-test</td>
<td>-.401</td>
<td>.661</td>
</tr>
<tr>
<td>Post-test</td>
<td>.224</td>
<td>.661</td>
</tr>
<tr>
<td>Delayed post-test</td>
<td>-.504</td>
<td>.661</td>
</tr>
</tbody>
</table>

As shown in Table 2, the values of skewness and kurtosis were within the ranges of +/- 2.

**Results**

Incorporating a pre-test, post-test and delayed post-test design, the present study was undertaken to test the following two null hypotheses:

- **H01:** Iranian pre-intermediate EFL Learners’ oral pushed output does not affect their learning of English perfect tenses.
- **H02:** Iranian pre-intermediate EFL Learners’ oral pushed output does not affect their retention of English perfect tenses.

Statistically, the assumption behind the first null hypothesis is that there are no significant differences between the experimental group’s means on the pre-test, post-test and delayed post-test. In order to compare the experimental group’s performance on these three tests, a repeated measures ANOVA was run. Table 3 holds the descriptive statistics of EG on the pre-test, post-test and delayed post-test.
Table 3

Descriptive Statistics of the Control and Experimental Group on the Pre-test, Post-test and Delayed Post-test

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>Pre-test control</td>
<td>52.8182</td>
<td>2.87882</td>
<td>46.4038 59.2326</td>
</tr>
<tr>
<td>Post-test control</td>
<td>55.1818</td>
<td>3.51573</td>
<td>47.3483 63.0153</td>
</tr>
<tr>
<td>Delayed-post-test control</td>
<td>49.5556</td>
<td>3.05556</td>
<td>42.5094 56.6017</td>
</tr>
<tr>
<td>Pre-test Experimental</td>
<td>50.8182</td>
<td>2.76609</td>
<td>44.6550 56.9814</td>
</tr>
<tr>
<td>Post-test Experimental</td>
<td>60.1818</td>
<td>2.75951</td>
<td>54.0333 66.3304</td>
</tr>
<tr>
<td>Delayed post-test Experimental</td>
<td>61.3636</td>
<td>2.73786</td>
<td>55.2633 67.4640</td>
</tr>
</tbody>
</table>

Table 3 illustrates the mean comparison between pre-test post-test and delayed post-test across the groups.

Any prior knowledge or pre-existing difference of the two groups was inspected through a Leven’s test of homogeneity of variance reported in Table 4.

Table 4

Leven’s Test of Homogeneity of Variance

<table>
<thead>
<tr>
<th></th>
<th>Pre-test of control and experimental groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene Statistic</td>
<td>.005</td>
</tr>
<tr>
<td>df1</td>
<td>1</td>
</tr>
<tr>
<td>df2</td>
<td>20</td>
</tr>
<tr>
<td>Sig.</td>
<td>.944</td>
</tr>
</tbody>
</table>

As table 4 indicates, the sig. level of the test is .94 which is greater than the research confidence interval (.05). This means that there is no significant difference in the pre-test of the two groups. Therefore, any difference in the post-test can be attributed to the treatment.

Table 5, containing tabularized results of the tests of Within-Subjects Effects, presents further information.
Table 5

*Tests of Within-Subjects Effect*

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sphericity Assumed</strong></td>
<td></td>
<td>2</td>
<td>367.182</td>
<td>9.018</td>
<td>.002</td>
<td>.474</td>
</tr>
<tr>
<td><strong>Greenhouse-Geisser</strong></td>
<td>734.364</td>
<td>1.517</td>
<td>484.193</td>
<td>9.018</td>
<td>.004</td>
<td>.474</td>
</tr>
<tr>
<td><strong>Huynh-Feldt</strong></td>
<td>734.364</td>
<td>1.731</td>
<td>424.277</td>
<td>9.018</td>
<td>.003</td>
<td>.474</td>
</tr>
<tr>
<td><strong>Lower-bound</strong></td>
<td>734.364</td>
<td>1.000</td>
<td>734.364</td>
<td>9.018</td>
<td>.013</td>
<td>.474</td>
</tr>
<tr>
<td><strong>Error (TESTS)</strong></td>
<td></td>
<td>20</td>
<td>40.715</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Sphericity Assumed</strong></td>
<td>814.303</td>
<td>15.167</td>
<td>53.690</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Greenhouse-Geisser</strong></td>
<td>814.303</td>
<td>17.309</td>
<td>47.046</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Huynh-Feldt</strong></td>
<td>814.303</td>
<td>10.000</td>
<td>81.430</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Lower-bound</strong></td>
<td>814.303</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As shown in table 5, the comparison of the experimental group’s means on the pre-test, post-test and delayed post-test (F 2, 20) = 9.01, P = .002 < .05, Partial η² = .47) indicated significant differences, which can be considered as evidence for the effectiveness of the treatment. Thus the first null hypothesis is rejected.

Moreover, although the F-value of 9.01 denotes significant differences between the experimental group’s means on the pre-test, post-test and delayed post-test, a post hoc comparison test was run to compare the means two by two. The tabulated results of the post hoc comparison are presented in table 6 based on which it can be claimed that:

A: There is a significant difference (Mean Difference = -9.36, P = .008 < .05) between the mean scores of the experimental group on the pre-test (Mean = 50.81) and the post-test (Mean = 60.18). The experimental group performed significantly better on the post-test.
Table 6

Post Hoc Comparison

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval for Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>Pre-test</td>
<td>Post-test</td>
<td>-9.364*</td>
<td>2.364 .008</td>
<td>.008</td>
<td>-16.147</td>
</tr>
<tr>
<td></td>
<td>Delayed Post-test</td>
<td>-10.545*</td>
<td>3.402 .034</td>
<td>.034</td>
<td>-20.308</td>
</tr>
<tr>
<td>Post-test</td>
<td>Delayed Post-test</td>
<td>-1.182</td>
<td>2.247 1.000</td>
<td>1.000</td>
<td>-7.632</td>
</tr>
</tbody>
</table>

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

B: There is a significant difference (Mean Difference = -10.54, P = .034 < .05) between the mean scores of the experimental group on pre-test (Mean = 50.81) and delayed post-test (Mean = 61.36). The experimental group performed significantly better on the delayed post-test.

C: There is not any significant difference (Mean Difference = -2.24, P = 1 > .05) between the mean scores of the experimental group on post-test (Mean = 60.18) and delayed post-test (Mean = 61.36).

The Second Null-Hypothesis holds that learner oral pushed output does not enhance the retention of English perfect tenses. Statistically, the assumption behind this null hypotheses is that the experimental group’s scores on the post-test and the delayed post-test are not significantly better than those of the control group.

Table 7 summarizes the descriptive statistics of the two groups in the post-test and the delayed post-test.
Table 7

Descriptive Statistics of the Two Groups in the Post-test and the Delayed Post-test

<table>
<thead>
<tr>
<th>Group</th>
<th>Tests</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>Post-test</td>
<td>60.182</td>
<td>3.160</td>
<td>53.590</td>
<td>66.774</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delayed Post-test</td>
<td>61.364</td>
<td>2.722</td>
<td>55.686</td>
<td>67.041</td>
<td></td>
</tr>
<tr>
<td>Control</td>
<td>Post-test</td>
<td>48.182</td>
<td>3.160</td>
<td>41.590</td>
<td>54.774</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Delayed Post-test</td>
<td>47.916</td>
<td>2.722</td>
<td>42.239</td>
<td>53.594</td>
<td></td>
</tr>
</tbody>
</table>

To compare the experimental group and control group’s performances on the post-test and the delayed post-test another repeated measures ANOVA was run the result of which is summarized in table 8. The results indicated a significant difference between the experimental group and control group’s means on post-test and delayed post-test (F (1, 20) = 12.94, P = .002 < .05, Partial η² = .39. It does represent a large effect size). Thus the second null-hypothesis is rejected.

Table 8

Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>130264.069</td>
<td>1</td>
<td>130264.069</td>
<td>947.140</td>
<td>.000</td>
<td>.979</td>
</tr>
<tr>
<td>Group</td>
<td>1780.800</td>
<td>1</td>
<td>1780.800</td>
<td>12.948</td>
<td>.002</td>
<td>.393</td>
</tr>
<tr>
<td>Error</td>
<td>2750.682</td>
<td>20</td>
<td>137.534</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Based on the findings of the study the experimental group outperformed the control group on both post-test (Mean = 60.18) and delayed post-test (Mean = 61.36).

Discussion

Based on the analysis of the gathered data, it can be claimed that oral pushed output as a means of practice seems to have both short-term
and long-term effects on the participants’ learning and retention of English perfect tenses. It should be reiterated that the oral pushed output tasks utilized in this study, unlike traditional mechanical drills, elicited the intended forms with a focus on meaning. This was in line with discourse-driven view of language which holds that “grammar choices are influenced by knowledge of context” (Andrews, 1997, p. 61). Grammar output practice, therefore, should push learners to use “target patterns or structures in a meaningful, hopefully engaging way” (Larsen-Freeman, 2003, p. 100).

The first research question of this study concerned the effects of oral pushed output on the learning of English perfect tenses. The statistical comparison of the experimental group’s scores on the pre-test with their own post-test scores indicated a significant degree of achievement. This finding is in line with the findings of similar studies, confirming the positive effects of providing language learners with pushed output opportunities as a means of practice (Byrne & Jones, 2014; Izumi, 2002; Leeser, 2008; Mackey & Philp, 1998; McDonough, 2005; Shehadeh, 2003; Song & Suh, 2008). This study with its focus on the oral channel of learner output reveals that meaningful and contextualized output produced specifically from oral channel can have similar positive effect on the development of grammatical accuracy. This is evident in the significant degree of gain shown by the experimental group on the immediate and the delayed post-tests and can confirm the advantages stemming from the experimental treatment. On the other hand, the comparison of the experimental group with the control group in terms of their performance on the post and the delayed post-test shows that notwithstanding their initial homogeneity, the experimental group outperformed the control group which further supports the benefits inherent in pushing learners to make use of their oral skills through producing meaningful and contextualized output to internalize their newly learned target language structure. However, this finding is in contrast with Rezvani’s (2011) results which did not yield any support for superiority of output tasks in helping the participants learn the
intended L2 forms. In Rezvani’s study, even though the participants of the experimental group “were engaged in an output task (reconstruction task) struggling to produce grammatical English sentences” (p. 676), they did not show higher accuracy gains compared to their counterparts in the control group. What is more, in this study the input enhancement group even outperformed the output group although this difference was statistically insignificant. Based on this finding, Rezvani concluded that output tasks do not have any superiority over some “implicit and unobtrusive method such as input enhancement” (p. 674).

As a matter of fact, different factors have been reported in the literature to impact the extent to which a task can push L2 learners to stretch their interlanguage, inter alia, the type and source of feedback (Lynch, 1997), pre-task planning (Yuan & Ellis, 2003), and task nature (Duff, 1986). Hence, Rezvani’s finding might be attributable to the type of output tasks and the degree of the push they imposed on the learners.

The second research question addressed the long term effects of oral pushed output on learning English perfect tenses which should manifest itself in the retention of the learned forms on the delayed post-test. The findings of the study indicated no significant difference between the mean scores of the experimental group on post and delayed post-tests. Accordingly, no attrition was evident in the results of their delayed post-test, administered a month after the post test. This can be considered as supporting evidence for the positive effect of learner output produced from oral channel not only on the learning, but also on the retention of the gained knowledge of the intended structures. This finding is similar to the results of studies conducted by Nobuyoshi and Ellis (1993) and Shintani and Ellis (2013). In a small scale study, Nobuyoshi and Ellis (1993) investigated the effect of pushed output production on the accuracy of past tense use over time. Their results indicated improvements in past tense accuracy in the participants’ output which was also maintained after a one-week interval. Concerning long term effects of pushed output, the study by Shintani and Ellis (2013) indicated that output-based instruction had strong long-term effects on gaining
productive knowledge of vocabulary. Being in line with their findings, the results of this study substantiate positive effects of output production in the process of SLA and indicate that its lasting effects are not limited to vocabulary acquisition and can affect learning grammatical aspects of the target language as well. Nevertheless, this finding is not congruent with that of Jabbarpoor and Tajeddin (2013). Whereas the results of their study revealed a U-shaped trend, i.e., backsliding in the accuracy development of the output group, the findings of the present study evidenced long term positive effects of pushed output tasks manifested in the experimental group’s performance on the delayed post-tests. The conflicting results gained by Jabbarpoor and Tajeddin might be the outcome of different factors including absence of rule instruction, corrective feedback and the length of time interval between the post and delayed post-test, plus the type of pushed output tasks. In their study, like the one conducted by Rezvani (2011), the output tasks were text reconstruction tasks whose nature might have yielded different degree of push and as a result affected the finding of the study. Furthermore, as put by Ellis (2007), output based instruction might be more effective in teaching and learning of some forms than others. Ellis argues that the choice of target linguistic feature might affect the impact of corrective feedback, which in turn can influence the effectiveness of modified output. The incongruent findings might also be attributable to channel aspect of the output, i.e. differences in cognitive processes involved in the performance of speaking and writing task might have influenced their effects on both acquisition and retention of the target language forms.

**Conclusion and Pedagogical Implications**

The results of the present study indicate the positive effect of oral pushed output on the acquisition of English perfect tenses by Iranian EFL learners and also on the retention of their leaned structures. This finding, being in line with other output studies, further supports Swain’s Output Hypothesis. From the findings of this study it can be concluded that while teaching grammar, which is typically taught as a separate course in
Iranian language schools and universities, pushing ESL learners to produce meaningful and contextualized oral pushed output can be a viable pedagogical technique. Moreover, pushing learners to produce oral pushed output might also be a feasible way for the actualization of some post method macro strategies like integrating language skills and facilitating negotiated interaction proposed by Kumaravadivelu (1994, 2006).

It should be noted that the present study has added to the output based literature by focusing on the effect of oral pushed output on the learning and retention of English perfect tenses. However, a word of caution is in order. Like most research projects, the present study suffers from some limitations that can restrict the generalizability of its findings and the possibility of drawing strong inferential conclusions. Firstly, the small number of the participants of the study should be noted. Moreover, the findings would be more persuasive if multiple task types could be used. This may include interactive oral pushed output tasks which can “facilitate negotiated interaction” (Kumaravadivelu, 1994, p. 32) whereby, learners can be “actively involved in clarification, confirmation, comprehension checks, requests, repairing, reacting, and turn taking” (pp. 33-34). Besides, a longer period of data collection and employing different data collection instruments may lead to a better description of changes in learners’ interlanguage.

More contribution to the field could be made through investigating the effects of immediate and delayed oral pushed output on more target linguistic forms. It can also be speculated that the inconclusive findings of output studies can be attributed to different factors including the participants’ learning style, and personality type which require further research. Another factor which is worthy of further investigation within the framework of Output Hypothesis is the presence or absence of feedback. The present study focused on the effect of oral pushed output with the assistance of explicit teacher feedback, while Swain and Lapkin (1995) argue that even without implicit or explicit feedback, output may lead to learners’ noticing the target language form and direct their
attention to linguistic forms. Therefore, it seems an essential area for further research to compare the effect of output in response to feedback and without feedback.

References
Bygate, M. (2006). Areas of research that influence L2 speaking instruction. In E. Uso-Juan, & A. Martinez-Flor (Eds.), *current trends in the development and teaching of the four language skills* (pp. 159-186). Berlin:Mouton de Gruyter.


