Applying Cooperative and Individual Offline Planning in Speaking Classes: A Comparison of Impulsive and Reflective EFL Learners

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Abstract
This study investigated the effect of two different types of offline planning, namely cooperative and individual, on the oral proficiency of impulsive and reflective EFL learners. Accordingly, 114 intermediate learners studying at a private language school in Tehran were chosen nonrandomly through their performance on a Preliminary English Test (PET). The participants also filled out the Eysenck and Eysenck’s (1991) Impulsiveness Questionnaire (EIQ) through which they were categorized into two subgroups within each offline planning setting consisting of impulsive and reflective learners. All in all, there were four subgroups: 28 impulsive and 28 reflective learners undergoing the cooperative offline planning treatment, and 32 impulsive and 26 reflective learners experiencing the individual offline planning treatment. Following the 14-session treatment, the mean scores of all four groups on the speaking posttest were computed and a two-way ANOVA was run to test all the four hypotheses raised in the study. The results revealed that the effect of offline planning to a great degree depends on the cognitive learning style of the learners: while impulsive learners benefit more from cooperative offline planning, reflective ones prefer to perform the task individually.
When a non-linguist is asked to define the language, s/he would probably describe it as a tool for communication in which the speaking skill plays an integral role that needs to be practiced. Indeed, speaking is regarded by many as the criterion for knowing a language (Celce-Murcia, 2001). Indeed, speaking is a skill that forms the basis of many people’s judgment about a person’s overall language competence and proficiency (Chuang, 2009).

Although speaking might be considered as the most problematic and demanding language ability, many EFL learners desire to master their oral proficiency since they would be able to express their feelings and thoughts, and also have a discussion and mutual friendship with other people. Actually, speaking allows them to be visible which is perhaps an indispensable aspect of daily life (Hedge, 2008). There is thus no wonder then that the theory and praxis of ELT are replete with studies on how to facilitate learners’ speaking skill (e.g., Abda, 2017; Goh & Burns, 2012; Nowicka & Wilczyn’ska, 2011; Omer & Attamimi, 2014; Richards, 2008; Tuan & Mai, 2015) with the Iranian context being no exception (Abbasi Dogolsara, Ahangari, & Seifoori, 2019; Bijani & Khabiri, 2017; Derakhshan, Nadikhalili, & Behesht, 2016; Marashi & Naddim, 2019; Rahnama, Fatehi Rad, & Bagheri, 2016).

As speaking is an interactive process of conceptualization, formation, and articulation (Levelt, 1989) and all three steps occur simultaneously, it is possible for English learners to make mistakes because humans possess a limited capacity and attending to all aspects of a task, regarding form and meaning, would be difficult and challenging. Therefore, learners need to have time to plan and practice in order to compensate for those limitations as
planning in advance affects language production and assists learners to access linguistic materials more easily and speedily (Alonso, 2018; Yuan & Ellis, 2003).

Contrary to writing tasks where learners have the opportunity to analyze, review, and correct their mistakes (Doboa, 2012), speaking requires to be processed online in addition to the element of performance (Swain, 2010). Therefore, L2 learners’ problems in production can be addressed if they are given time inside or outside the class to prepare and plan for their presentation in order to have a desirable influence on their interlocutors and release them from processing load pressure (Tuan & Neomy, 2007). Ellis (2003) refers to such preparation as pre-task or strategic planning, also referred to as offline planning, which “occurs before a speaker engages in communication activity” (p. 109). For example, in the Test of English as a Foreign Language (TOEFL), candidates are given 15 seconds to get prepared for the task and then perform it. A significant number of studies have been reported on the application of offline planning in ESL/EFL (e.g., Bamanger & Khalid Gashan, 2015; Kawauchi, 2005; Tavakoli & Skehan, 2005; Wigglesworth, 1997) with some having been conducted in Iran (for instance, Abdi, Eslami, & Zahedi, 2012; Ahmadian & Tavakoli, 2011; Fatemi, Tafazoli, & Ghanbarizadeh, 2015).

According to Tuan and Neomy (2007), offline planning can be done individually or cooperatively. Most of the planning studies conducted have concentrated on individual planning whereby time is given to candidates to plan in isolation and few pieces of research have investigated group or cooperative planning (Birjandi & Alipour, 2011). The actions, intentions, and interdependencies of all participants can be taken into consideration through cooperative planning that seeks to take full advantage of the total value by following the best action (Johnson & Johnson, 2015). Cooperative learning
has been the subject of a multitude of studies that almost universally favor cooperative learning (e.g., Ahangari & Samadian, 2014; Farzaneh & Nejadansari, 2014; Johnson, Johnson, & Holubec, 2008; Marashi & Khatami, 2017; Marashi & Sanatipoor, 2015; Wang, 2007; Zahedi & Tabatabaei, 2012).

Alongside the methodology of teaching which has been arguably the major concern within the realm of ELT for well over a century now, the issue of learning styles among learners has gained momentum (Boyle, Mathews, & Saklofske, 2008). Kolb and Kolb (2005) point out that determining the learning style of an individual can illustrate the most efficient channel through which classes can be conducted. Indeed, learning styles – cognitive learning styles, in particular – are influential in the process of learning (Weisstein & Jacobson, 2009).

One such cognitive learning style is reflectivity and impulsivity: “Reflective learners are those who seek accuracy and fluency, while impulsive learners prefer to learn more systematically rather than more accurately” (Xu, 2011, p. 414). Indeed, reflective learners avoid making mistakes though impulsive learners might be more exposed to making mistakes (Chamorro-Premuzic, 2007; Srivastava, 1997). The impact of learners’ impulsivity/reflectivity on their learning continues to draw the attention of L2 researchers both globally and in Iran (e.g., Jamieson, 1992; Mall-Amiri & Navid Adham, 2013; Michańska-Stadnik, 2013; Morovat, 2014; Nietfeld & Bosma, 2003; Shafiee & Khavaran, 2016).

From what has been stated so far, one can demonstrate the importance of English language learners’ speaking skill and impulsivity/reflectivity together with offline planning in the ELT literature. Accordingly, there have been studies on group pre-task planning on learners’ oral performance (Birjandi & Alipour, 2010) and the accuracy of composed narrations (Haghverdi, Biria, &
Khalaji, 2013) while Kang (2018) compared individual and collaborative pre-task planning on oral task performance. However, there seems to be no study in the literature comparing the performance of reflective and impulsive learners through cooperative offline planning while it seems that the above cognitive learning style among EFL learners may perhaps be a decisive factor in both how they go about with offline planning and their function in a cooperative and individual setting. To this end, the present study was conducted to respond to the following research questions:

Q1: Is there any significant difference between the effect of cooperative and individual offline planning on impulsive EFL learners’ speaking?

Q2: Is there any significant difference between the effect of cooperative and individual offline planning on reflective EFL learners’ speaking?

Q3: Does cooperative offline planning have a significantly different effect on impulsive and reflective EFL learners’ speaking?

Q4: Does individual offline planning have a significantly different effect on impulsive and reflective EFL learners’ speaking?

**Review of the Related Literature**

**Speaking**

Basically, the prime objective of learning a language is the ability to speak and have oral interaction with others (Nunan, 2003; Richards & Renandya, 2002). Accordingly, the purpose of English teaching is to enable learners to use English appropriately and efficiently in communication (Davies & Pears, 1998, as cited in Tuan & Mai, 2015). To this end, huge efforts have been made to find techniques and strategies that assist learners to overcome the difficulties in speaking and communicating fluently and
Accordingly, to acquire a fluent and accurate command of the speaking skill, learners need to integrate linguistic skills (i.e., grammatical competence) and sociocultural knowledge together with discoursal and strategic competences (Canale & Swain, 1980). All this of course necessitates advancing subtle and detailed knowledge about why, how, and when to communicate in the oral mode in the process of L1 and/or L2 learning (Riddell, 2010).

Cooperative/Individual Learning

Among the various approaches to language teaching, the theory and practice of cooperative learning vis-à-vis individual learning is substantially documented in the education literature (Deutsch, Coleman, & Marcus, 2006). Emerging as perhaps an antithesis to the teaching paradigm of the 1960s which was then propelled by behaviorism and also social Darwinism and thus strongly advocated competitive and individualistic learning, cooperative learning revisited the pre-modern notion of learning as a community (Johnson, Johnson, & Smith, 1995).

Cooperative learning is conceptualized as a range of notions and techniques for promoting the value of interactions among students (Slavin, 1992). This mode of learning is defined as a learning environment where students engage in academic tasks in smaller heterogeneous denominations. To this end, the teacher monitors these groups to check whether the students are learning and functioning in a coherent and streamlined manner and how learning how through participation is taking place (Deutsch et al., 2006; Kagan, 1994).

In effect, individual learning prevails when one student actualizes his/her
goal at the price of the other students failing to do so (Kessler, 1992). Under individualistic circumstances, the outcome of each person is independent of that of others (Shumway, Saunders, Stewardson, & Reeve, 2001).

**Offline Planning**

Planning can be defined as a self-organizing, meditative process through which an individual becomes partially cognizant of its development and it needs motivation and metacognitive skills. The planning process can integrate numerous sections and levels of functioning of a schema and is an only human function that is closely connected to language use (Das, Kar, & Parrilla, 1996). Moreover, Ellis (2005) states that planning is a problem-solving activity, which decides what linguistic devices should be selected to affect the listener intently.

Offline planning occurs when “students are given a chance to perform the task before the formal performance of the task and includes task repetition since the first time performance is viewed as preparation for the later performance” (Skehan & Foster, 2008, p. 210). Hence this may benefit learners in task performance because as learners repeat the same task, they demonstrate a difference between attention and commitment (Ong & Zhang, 2010; Tavakoli & Foster, 2008). Ellis (2005) further identifies two major modalities of task planning: pre-task or offline planning which happens before performing the task, and online planning which happens while performing the task.

**Impulsivity/Reflectivity**

Impulsivity refers to the degree to which learners make quick decisions and guess the answer to questions without correctly reflecting on the issue and their comprehension while reflectivity is about those capabilities of language learners to reflect on questions and think about them prior to responding to
them (Folse, 2008) or, in the words of Brown (2007), an impulsive person “is a person who tends to make a quick or gambling guess at an answer to a problem and a reflective person tends to make a slower, more calculated decision” (p. 127).

Likewise, Ehrman and Leaver (2003) state that reflective learners are those who prefer to first think and then answer to the question since they tend to be accurate. Due to their slowness, they may have some difficulties in completing a test in a timely manner; nevertheless, the completed parts are probably accurate. On the contrary, impulsives are those who answer very quickly and want to finish a task or a test rapidly but often with less accuracy (Dörnyei & Skehan, 2003; Winke, 2007).

**Method**

**Participants**

The present study was conducted with 114 female intermediate EFL learners aged 19-33 studying at one of Tehran’s many private language schools. These participants were non-randomly selected through convenience sampling from among an existing group of 202 learners based on their performance on a sample piloted language proficiency test (those whose scores fell within one standard deviation above and below the mean). In addition, the participants filled a questionnaire that identified the degree of a person’s impulsivity and reflectivity.

The 114 learners were thence randomly assigned into four groups: 32 impulsive and 26 reflective learners undergoing the individual offline planning procedure and again 28 impulsive and 28 reflective learners receiving the cooperative offline planning procedure.
Another 30 intermediate learners who shared almost the same language proficiency as the main participants took part in the piloting of the sample proficiency test. Furthermore, the two researchers who shared a significant inter-rater reliability \( r = 0.723, p = 0.000 < 0.01 \) rated the speaking tests.

It is important to note that as the 114 intermediate learners were not available to the teacher/researcher (one of the researchers in this study) during one single term, the treatment was conducted over a course of three terms; that is to say that each term in the language school where the teacher/researcher was teaching, an average of 40 learners in three classes underwent the instruction thus enabling the completion of the treatment in the four groups divided into 12 classes over a period of three terms.

**Instrumentation and Materials**

A number of tests and teaching materials together with a questionnaire were used in this study, all of which are described below.

**Preliminary English Test (PET)**

A sample PET developed by Cambridge ESOL was administered for the participant selection process (already described above). This test comprises all the four language skills of reading, writing, listening, and speaking in the three papers of reading and writing (paper 1), listening (paper 2), and speaking (paper 3). The PET contains 75 items. As this research was focused on the speaking ability of the learners, the writing section of the PET was not administered. The reliability of the PET stood at 0.92 and 0.91 during the piloting and main administration, respectively.

**Speaking Posttest**
Another sample PET speaking paper was employed at the end of the treatment for all four experimental groups as the posttest. This test lasted for 10-12 minutes per pair of candidates and comprised four parts. In the first part, candidates interact with an examiner. In parts two and four, they interact with another candidate and in part three; they have an extended individual long turn. The test focus of the speaking part is the assessment of candidates’ ability to express themselves in order to carry out functions at a threshold level, to ask and to understand questions, to make appropriate responses, and to talk freely on matters of personal interest. Candidates are assessed on their performance throughout the test. There are 25 marks in this paper, making 25% of the total score for the whole examination.

**Rating Scale for the PET Speaking Part**

The PET rating scale for the speaking part designed by Cambridge ESOL was used by the researchers in this study to score the participants’ speaking performance on both the speaking parts used at the outset for homogenization and the posttest.

**Eysenck and Eysenck’s Impulsiveness Questionnaire**

Eysenck and Eysenck’s (1991) Impulsiveness Questionnaire (EIQ) contains 54 items and assesses impulsiveness (19 items), venturesomeness (16 items), and empathy (19 items). The impulsivity sub-scale of the questionnaire in Farsi validated by Seena Institute of Behavioral and Cognitive Sciences consisting of 19 Likert scale items (1-5) was used in this study as the English language proficiency of the participants would not enable them to understand the original English instrument. The reliability of the instrument in this administration was 0.89 and the range of the scores was 19-95. Those scoring
65-95 are impulsive while those scoring 19 to 45 are considered reflective. The scores within the range of 46-64 represented a medium mix of impulsivity/reflectivity and were thus excluded from this study. The time needed to answer this translated EIQ is 10 minutes.

**American English File 3**

The main textbook in this study was *American English File 3* by Latham-Koenig and Oxenden (2014). It contains 10 units and each unit is divided into two lessons of A and B and includes different tasks and exercises for all four skills and three subskills. In this study, units 4-6 were covered. The workbook containing 10 units including two lessons of A and B was used. In this study, units 4-6 were practiced.

**Oxford Word Skills**

Another series used in this study was *Oxford Word Skills* by Gairns and Redman (2008) for the intermediate level. It contains 80 units of vocabulary and practice. A total of eight units of this book were covered in each of the four groups in this study.

**Language Tasks**

Fourteen tasks that were based on the classroom materials were given to the students during the term. The set comprised the following two task types: seven narratives (which are supported by visual material but need material organization to tell a story effectively). For example, a picture was given to the students and they were asked to explain what was going on. The second type comprised seven decision-making tasks (requiring the capacity of attributing a set of reasons to a set of decisions that have to be made) were
given to them. For instance, they were given two choices and were asked to choose one of them by giving reasons to support their ideas.

**Procedure**

Following the process of making sure that the participants were homogenized in terms of both their general language proficiency and speaking ability prior to the treatment and subsequently divided into the four experimental groups (detailed earlier), the treatment consisting of 16 sessions of 90 minutes each began throughout eight weeks. All four groups were taught by the same teacher (one of the researchers) using the same teaching materials.

The 114 participants sat in 12 different classes (three classes in each of the four groups) which meant an average of 9-10 students in each class. Every session, two pages of the main course book (*American English File 3*) were taught in each class; accordingly, each unit took an average of four sessions to be taught completely. Also, at the beginning of each session, one page of *Oxford Word Skills* (which the learners had been asked to study at home) was practiced and covered while every other four sessions, the workbook was checked. In addition, a narrative or decision-making task was given to the participants each session as part of their regular classroom instruction. As the first session was used for participant selection and the last session for the posttest, the participants underwent 14 sessions of instruction and thus practiced 14 tasks throughout the instruction.

The teacher closely monitored the offline planning in all classes. In effect, she observed students’ work to make sure they were not using their L1 in group discussions. In addition, the students were asked to write some keywords and/or brainstorm their ideas to help them recall the theme of their speech. During the learners’ speaking time, the teacher provided feedback to
all groups and corrected their mistakes using a variety of error correction techniques. The learners in all groups practiced speaking in different forms such as narrating a story and decision making.

**Individual Planning Group**

The teacher described the task to be worked on to the participants in the individual offline planning group and told them that they would be given some time to plan (3-5 minutes depending on the task difficulty and complexity). The teacher also noted to the learners to think about what they would say when they did the offline planning individually. Once the planning time was over, three students were chosen randomly and asked to talk about the task.

**Cooperative Planning Group**

In contrast, the participants in the cooperative offline planning group worked on the same task in groups of three or four, depending on the number of the students after the teacher provided the same description of the task; the students were asked to plan the given task in groups. For doing the tasks, the learners were randomly put within groups; these groups were not fixed during one term or even one session and varied in order for the learners to experience working cooperatively with different classmates rather than an invariable group. Following the end of the group work, three participants were selected randomly from different groups to talk about the task at hand. The students in each group were not aware beforehand who was going to talk about the task after the group planning.

Once the treatment was completed in all four groups, all the participants sat for the same posttest.

**Results**
Participants Selection

The participant selection process comprised the three stages of the PET piloting, the PET main administration, and checking the homogeneity of the participants in terms of their speaking prior to the treatment. During the piloting, the mean and standard deviation of the scores stood at 54.30 and 9.66, respectively.

Descriptive Statistics of the PET Administration

The descriptive statistics of this administration are presented below in Table 1.

Table 1. Descriptive Statistics of the PET Administration

<table>
<thead>
<tr>
<th>Statistic</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score</td>
<td>202</td>
<td>26</td>
<td>71</td>
<td>49.64</td>
<td>8.875</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>202</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As is shown in Table 1, the mean of the scores was 49.64 while the standard deviation of the scores stood at 8.87.

Dividing the Participants into the Four Groups

Among the above 202, a total of 134 whose scores fell one standard deviation above and below the mean were selected. Subsequently, these 134 sat for the EIQ, among whom 60 were identified as impulsive and 54 as reflective (a total of 114 participants). These 114 were assigned to four groups of 26, 28, 28, and 32 (as described earlier). Table 2 displays the descriptive
statistics of these 114 participants’ scores on the speaking section of the PET administered earlier.

As Table 2 shows, the mean score of the impulsive individual planning group was 15.48, and their standard deviation 2.93. The mean and standard deviation in the impulsive cooperative planning group were 14.64 and 2.32, respectively. In the reflective individual planning group, the mean was 15.08 and the standard deviation 2.39 while the two figures 14.91 and 2.06, respectively, in the reflective cooperative planning group.

Table 2.
Descriptive Statistics of the Scores of the 114 Students on the PET Speaking Section

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>32</td>
<td>12</td>
<td>21</td>
<td>15.48</td>
<td>2.931</td>
<td>.439</td>
<td>.414</td>
</tr>
<tr>
<td>Impulsive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative</td>
<td>28</td>
<td>11</td>
<td>20</td>
<td>14.64</td>
<td>2.321</td>
<td>.488</td>
<td>.441</td>
</tr>
<tr>
<td>Reflective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>26</td>
<td>10</td>
<td>19</td>
<td>15.08</td>
<td>2.348</td>
<td>-.406</td>
<td>.456</td>
</tr>
<tr>
<td>Reflective</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative</td>
<td>28</td>
<td>10</td>
<td>19</td>
<td>14.91</td>
<td>2.060</td>
<td>-.304</td>
<td>.441</td>
</tr>
<tr>
<td>Valid N</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(listwise)</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
To ensure further homogeneity of speaking among the four groups at the outset, a one-way ANOVA was run between the mean scores of the four groups on the PET speaking section. Prior to this, of course, the two assumptions for running this parametric test had to be checked.

Firstly, the descriptive statistics of all four subgroups was checked for normality of distribution. As is evident from Table 2, the skewness ratios of all four subgroups (1.06, 1.10, -0.89, and -0.68) fell within the acceptable range of ±1.96. Next, Levene’s test of homogeneity of variances was checked ($F_{(3,110)} = 1.909, p = 0.132 > 0.05$) which showed that the variances among the four groups were not significantly different. The results of the one-way ANOVA are reported in Table 3.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>S Ig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>11.237</td>
<td>3</td>
<td>3.746</td>
<td>.620</td>
</tr>
<tr>
<td>Within Groups</td>
<td>664.044</td>
<td>110</td>
<td>6.037</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>675.281</td>
<td>113</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 3 indicates, with the F value of 0.620 at the significance level of 0.603 being greater than 0.05, the four groups’ mean scores were not significantly different. Hence, the researchers could rest assured that the four groups bore no significant difference in their speaking at the outset.

**Posttest**
At the end of the treatment, the posttest (detailed earlier) was administered to all four groups. A series of statistical analyses were conducted before and after the administration which are described below. The descriptive statistics of the posttest is displayed in Table 4.

Table 4. Descriptive Statistics of the Scores of All Four Groups on the Posttest

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Skewness</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulsive Individual</td>
<td>32</td>
<td>12</td>
<td>22</td>
<td>16.03</td>
<td>2.697</td>
<td>.451</td>
<td>.414</td>
</tr>
<tr>
<td>Impulsive Cooperative</td>
<td>28</td>
<td>13</td>
<td>21</td>
<td>16.80</td>
<td>1.988</td>
<td>.424</td>
<td>.441</td>
</tr>
<tr>
<td>Reflective Individual</td>
<td>26</td>
<td>14</td>
<td>21</td>
<td>17.42</td>
<td>1.978</td>
<td>-.019</td>
<td>.456</td>
</tr>
<tr>
<td>Reflective Cooperative</td>
<td>28</td>
<td>12</td>
<td>19</td>
<td>15.68</td>
<td>1.770</td>
<td>-.437</td>
<td>.441</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>26</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As the table shows, the mean score of the impulsive individual planning group was 16.03, and their standard deviation 2.70. The mean and standard deviation in the impulsive cooperative planning group were 16.80 and 1.99, respectively. In the reflective individual planning group, the mean was 17.42 and the standard deviation 1.98 while the two figures 15.68 and 1.77, respectively, in the reflective cooperative planning group.

Testing the Four Hypotheses

Based on the four research questions raised earlier, four hypotheses were formulated. To test these hypotheses, a two-way ANOVA was required since there is a dual learning modality (individual versus cooperative offline
planning) and also a dual personality style (impulsive versus reflective learners) involved with one dependent variable (i.e., speaking skill) at stake. Prior to this, of course, the two assumptions for running this parametric test had to be checked. Firstly, the descriptive statistics of all four groups, that is, impulsive learners in the individual planning group, impulsive learners in the cooperative planning group, reflective learners in the individual planning group, and reflective learners in the cooperative planning group had to be checked for normality of distribution.

As is evident from Table 4, the skewness ratios of all four subgroups (1.08, 0.96, -0.04, and -0.99) fell within the acceptable range. The next assumption was checking Levene’s test of equality of error variances; the variances among the four subgroups were not significantly different ($F_{(3,110)} = 2.362$, $p = 0.075 > 0.05$). Accordingly, running a two-way ANOVA was legitimized. To illustrate the factorial design, the interaction of the two modalities of the independent variable (individual versus cooperative offline planning) and moderator variables (impulsive versus reflective learners) in this study are displayed in Table 5.

Table 5.

<table>
<thead>
<tr>
<th>Personality style</th>
<th>Impulsive (1)</th>
<th>Reflective (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual planning (1)</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>Cooperative planning (2)</td>
<td>28</td>
<td>28</td>
</tr>
</tbody>
</table>

Table 6 shows the results of the tests of between-subjects effects.

Table 6.

Tests of Between-Subjects Effects
As Table 6 indicates, the significance value was less than 0.05 ($F_{(3,110)} = 3.591, p = 0.016 < 0.05$). Furthermore, there was a significant difference between both impulsive and reflective learners ($F_{(1,110)} = 0.108, p = 0.001 < 0.05$) and individual and cooperative offline planning in this study in general ($F_{(1,110)} = 9.594, p = 0.002 < 0.05$).
Interaction of the Instruction Type and Personality Styles on the Posttest

Finally, as the interaction of the instruction type and personality style proved significantly different \(F_{(1,110)} = 1.431, p = 0.034 < 0.05\), the overall conclusion was that the interaction of the two instruction types (individual versus cooperative offline planning) with the two personality styles (impulsive versus reflective learners) proved significant (Figure 1).

Based on the ANOVA table revealing the significant differences, all four null hypotheses were rejected. In other words,

- There is a significant difference between the effect of cooperative and individual offline planning on impulsive EFL learners’ speaking.
- There is a significant difference between the effect of cooperative and individual offline planning on reflective EFL learners’ speaking.
- Cooperative offline planning has a significantly different effect on impulsive and reflective EFL learners’ speaking.
- Individual offline planning has a significantly different effect on impulsive and reflective EFL learners’ speaking.

Finally, the researchers calculated the observed power to determine the strength of the findings of the research, that is, to evaluate the stability of the research findings across samples, the effect size was also estimated. The observed power as shown in Table 7 was 0.74 for the instruction type which is considered a moderate effect size and 0.91 for the personality style which is considered strong, according to Mackey and Gass (2016).

Table 7. 
Estimates of Effect Size for the Posttest

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<th>Source</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Powerb</th>
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As in this univariate two-way ANOVA, there were only two modalities of the independent variable (instruction type) and two fixed factors (personality style), running post-hoc tests was not feasible since a minimum of three cases are required for such tests.

**Discussion**

As the results of the systematic investigation of the variables indicated, both cooperative and individual offline planning were effective in boosting the speaking ability of the participants since the posttest scores of all four groups increased significantly compared to their pretest scores. This result acknowledged the findings of previous studies that claimed the effectiveness of offline planning on language learning, in general. Examples of such studies are Ahmadian and Tavakoli (2011), Haghverdi et al. (2013), Mehnert (1998), Ortega (1999, 2005), Skehan and Foster (1997, as cited in Abdi et al., 2012), Mohammadzadeh, Dabaghi, & Tavakoli (2012), Rahimpour and Nariman-Jahan (2011), and Yuan and Ellis (2003), all of which demonstrated that offline planning is more effective in language learning.

The findings of this study are also in line with those studies that have shown clear effects of planning on EFL learners’ oral production, in specific. Kawauchi (2005), for instance, proved the efficiency of planning on production in oral narrative tasks based on learners’ language proficiency. Kang’s (2018) study also proved that planning itself resulted in greater fluency and accuracy of oral task performance. Moreover, Yuan and Ellis (2003)
reported that unpressured within-task planning positively influences the accuracy of oral production.

Another finding of the study was the significant difference between the effect of cooperative and individual offline planning on impulsive EFL learners’ speaking ability. This result was partially congruent with the findings of Shafiee and Khavaran (2017) who found student team achievement divisions (STAD) is more compatible with impulsive learners. Although their instructional method, i.e., cooperative learning, was different from the one used in this study, i.e., cooperative offline planning, both types of instructions involved cooperation. A similar result was found with regards to the difference between cooperative and individual offline planning on reflective learners, except that reflective learners were more compatible with individual planning. It seems that while impulsive learners are more inclined towards cooperation, reflective ones prefer to complete their tasks individually.

The abovementioned inclinations have been seen in previous researches using close calibers to the present study. For example, Marashi and Dibah (2013) concluded that while extrovert learners’ speaking improves as a result of cooperative learning, introverts can benefit significantly in their speaking from competitive learning. As introvert learners are rather close in personality to reflective ones and extroverts to impulsive ones, the results of this study somewhat confirm Marashi and Dibah’s (2013) argument that one cannot categorically postulate that extrovert/impulsive learners outperform introvert/reflective learners and/or vice versa; rather, the modality of instruction is very much at work in determining the equation.

Grounding on the same discussion mentioned above based on Marashi and Dibah’s (2013) work, Marashi and Naddim (2019) demonstrated that, contrary to the general belief that extrovert (or in this case impulsive) learners
are better speakers of language than introvert (or in this case reflective) ones, it is the type of tasks that determines the difference in the performances of the two. Accordingly, while extroverts benefited more from information gap tasks (which require individual work), opinion gap tasks (which are of course very much a cooperative activity) helped introverts improve significantly. This result is again very much congruent with the finding of this study: Impulsive learners enjoyed the opportunity provided to them in cooperative planning to fulfill their personality needs as did the reflective ones with individual planning.

The compatibility of cooperative offline planning with impulsive learners’ speaking achievement can also be discussed with reference to the sociocultural theories of L2 development (Lantolf, 2000), and based on Vygotsky (1978). The sociocultural theory of L2 development specifies that L2 learners’ linguistic development is supported in interaction with other members in the classroom. It is believed that they provide the learner with appropriate levels of assistance, that is scaffolding. It is generally believed that this assistance happens in language classrooms when learners work together as pairs or groups (e.g., Nassaji & Tian, 2010; Swain, 2010; Swain & Lapkin, 2002). It can be concluded that the participants of the study profited from this assistance in their language classroom.

In addition, the results support the study by Doboa (2012) who showed that collaboration has become an essential part of any classroom and she maintains that this has been theoretically supported by the sociocultural theory of L2 development. By combining “their linguistic resources to solve the problems faced, learners involve in language-mediated cognitive activities that are thought to help the construction of language knowledge and a higher level of performance” (Doboa, p. 4060).
Finally, the compatibility of individual offline planning with reflective learners’ speaking achievement is a reminder of Jahanbakhsh and Ajideh’s (2018) work. They argued that Iranian learners are individualistic and competitive regarding their culture of learning as affected by the fact that they know they will be evaluated individually at the end of the course. Growing in such a learning environment makes them inclined to individually completed tasks such as individual planning. Therefore, it is not surprising that they did well in such planning. However, as they continue in their argument, the culture of learning is not a fixed phenomenon resistant to any change. Their study shows that if learners are given the right opportunity by an appropriate method of teaching, they are willing to blend into a more cooperative work as happened with the case of cooperative planning in this study.

Adding to the above argument, the researchers believe that learners’ personality styles may also play a role here. While reflective learners follow their personality to keep on individual work they have been used to as a result of their learning culture, impulsive learners’ personality style keeps them motivated to move towards cooperation and benefit from interactional learning based on sociocultural theory.

**Conclusion**

The result of the present study indicated significant compatibility of cooperative offline planning with impulsive learners as well as individual offline planning with reflective ones. Based on the research findings, this study suggests the following implications for EFL teachers, learners, and syllabus designers.

As the results of the present study indicated, each of the two types of offline planning is more effective with certain types of personality styles.
Hence, teachers need to have a better understanding of these styles and factors affecting students’ speaking performance so that they can help them improve their speaking abilities.

Based on the findings of this study, impulsive learners are more compatible with cooperative planning. This point provides support for the constructivist theory of learning which strongly supports the role of interaction and collaboration in learning (Ashton-Hay, 2006; Sprenger & Wadt, 2008). As a result, EFL teachers may want to plan the classroom instruction such that interaction and collaboration are favored among impulsive learners. As for reflective learners, teachers may wish to engage them further in individual offline planning.

At a broader level, EFL teachers can also explicitly familiarize learners with different personality styles, what they mean, and how they assist learning. That way, learners can gradually develop a sense of what is needed to become autonomous learners for each and every single one of them not necessarily through the same modality. All this familiarization and actual praxis of course have to be done by teachers with not the slightest indication in any manner or quantity of discrimination. That is to say that, teachers must not get involved in the process of favoring one personality style to the other which could easily culminate in the marginalization of certain learners. Simply put, there is no room whatsoever in establishing the *us and them* environment in the class. It is one thing to encourage impulsive learners to be somewhat more reflective thus producing more accurate language while encouraging reflective learners to make some impulsive-oriented adjustments enhancing their fluency and it is a totally different – and in this case unacceptable – trend to discriminate against one group.
The above subtle point is universally true as teachers regardless of their field and level of teaching, race, ethnicity, gender, religion, socioeconomic status, and other consideration need to remember and adhere to one incontroversible principle. That principle is none other than zero tolerance for violating fundamental human rights in a classroom with discrimination being one such sheer instance.

As for students, they often measure their success in the process of language learning as well as the effectiveness of the English course on the foundation of how well they feel their spoken language skill is developed (Richards, 2008). In order to facilitate and optimize this complicated process of improving one’s speaking, learners themselves play a crucial role in the process of learning (Mitchell & Myles, 2004).

In order to fulfill this role effectively, learners need to be aware of their individual differences and preferences. Through being guided by teachers on what their personality traits are and which teaching practices best fit them, learners can improve their speaking abilities. Indeed, such an approach can help learners to take more responsibility in their learning process and consequently be more autonomous which is of course the ultimate goal of any progressive educational program.

There is no doubt that syllabus designers, through providing the instructional materials, can profoundly affect and direct the language learning process; in fact, what they produce provides language teachers with a range of possible classroom activities and tasks (Nation & Macalister, 2010). Syllabus designers and materials developers could infuse various types of planning practices into materials for providing the chance for learners with differences in their individual styles.
More specifically in the context of the findings of this present study, materials developers perhaps need to broaden their horizons when designing lessons based on offline planning tasks such that they could accommodate both reflective and impulsive personality styles. For this, they need to include both sets of tasks which are to be done by learners individually and cooperatively. Again, this approach is a step in the right direction towards the human-rights paradigms of maximizing inclusiveness (covering more and more learners) and preventing marginalization.

In the process of conducting this study, certain suggestions for other studies in line with the one at stake came to the researchers’ minds, which are presented below to interested researchers who are keen to conduct relevant studies:

1. In this study, two types of offline planning were explored with regard to their effectiveness in boosting the speaking abilities of impulsive and reflective learners. Another study could be conducted to find out whether the two instructions would benefit the other skills as well as speaking or not.

2. The focus of this study was only on offline planning as its instructional method. Other types of planning, namely online planning, could be the focus of other studies within the same design and caliber.

3. The study inspected the moderating role of personality style on the two instructional methods. Similar studies may consider other individual differences such as cognitive factors or learning styles as their moderator.

4. This research was carried out among adults; the same experiment could be implemented among other age groups to see whether age is a determining factor as well.
5. Only female students participated in this research; another study with males and also one in a co-ed setting are suggested to see whether gender also bears a decisive role or not.

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