The Effect of Code Switching on the Acquisition of Object Relative Clauses by Iranian EFL Learners

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Abstract. This study attempted to investigate the impact of teacher’s code-switching on the acquisition of a problematic grammatical structure, namely, object relative clauses, by intermediate EFL learners. Moreover, a secondary objective of the study was to determine the EFL learners’ attitudes and opinions regarding the effectiveness of teacher’s code-switching in their learning of a specific aspect of English grammar, object relative clauses. To meet this end, 54 EFL learners from the Jamea Language Institute in Tabriz were selected and took part in grammar and attitudes pre-tests and underwent the necessary instructions. Whereas in the experimental group, explicit grammar instruction was used along with the teacher’s code-switching, in the control group, explicit grammar instruction was given only in English which was the medium of instruction. Finally a questionnaire and post-tests were administered. Two ANCOVAs were run on the collected data not only to compare the performance of both experimental and control groups after the treatment period, but also to show whether post-test differences were due to the effect of treatment-code-switching-or their differences.
in pre-tests. The results of the ANCOVAs revealed that teacher’s code-switching was positively effective both on learning problematic grammatical structure (i.e., object relative clauses) and learners’ attitudes toward the teacher’s code-switching. The results of the present study could help language teachers, teacher trainers, and policy makers to provide a better context for foreign language learning and improving different language skills.

**Keywords:** Code-switching, grammatical structure, object relative clauses

1. **Introduction**

Code-switching, the interchanging use of two distinctive languages, is placed in the field of bilingualism and is viewed as a shared characteristic of those who speak two or more languages. Code-switching is often studied from two different viewpoints: linguistic and social, and it is therefore defined variously. Investigating the issue of code-switching in bilingual and social settings, many scholars put their concentration mostly on its types and its functions (e.g., Gumperz, 1982; Poplack, 1980). Their research set a good background for later scholars in other contexts, especially education (e.g., Canagarajah, 1995; Macaro, 2001). In the classroom context, this issue has made more and more educational researchers interested in their exploration into the various kinds of code-switching, its function, its impact on the speakers who utilize it, and the reasons for code-switching. Code-switching happens prevalently in language classrooms across the world where teachers are teaching a foreign language (FL) or a second language (SL). The Iranian FL teaching context is no exception. In the Iranian EFL teaching setting, code-switching, the alternation between learners’ first language, in other words, Farsi and learners’ target language (i.e., English), is a common factor in schools, universities, and language institutes. It is obvious that code-switching is utilized by teachers of English while speaking with other teachers of English and, especially, in their classroom instruction. It is clear from the researcher’s own experience and observation of other EFL teachers’ teaching practice that Iranian EFL teachers often code-switch. In other words, they use both Farsi and English, in different stages in their EFL classroom. Nevertheless, little information is known about the phe-
nomenon in the Iranian EFL teaching context. Thus, a clear understanding of how code-switching happens, when it takes place, and for what reasons it happens. For this reasons, the researchers hope to find out the effect of code switching on the acquisition of object relative clauses which helps writers, students, teachers, professors use and understand language more effectively.

There have been several studies of code-switching practices conducted by teachers in classroom instruction across the world, especially in Asian teaching and learning context, where English is mainly instructed as a foreign language. Those studies are usually performed by using survey questionnaires (e.g., Lee, 2010), classroom observations and/or interviews (e.g., Greggio & Gil, 2007). In Iran, there have been studies related to EFL educational issues, for example, issues related to teacher development (Eftekhari, 2001), and understanding of the communicative approach to language teaching (Moradkhani, 2012). Nevertheless, up to now, there are some studies in the Iranian educational context which have investigated the issue of teachers’ code-switching practice in their English classroom teaching, even though this practice commonly takes place. One study (Farjami and DavatgariAsl, 2013) explored teachers’ beliefs and performances to the degree that it provided general information about teachers’ use of their first language (i.e., Farsi) in their English classrooms by interviewing a confined number of teachers. On the other hand, grammar instruction has been one of the most controversial aspects of L2 acquisition. Whether EFL teachers’ code-switching can facilitate the complicated process of grammar learning for EFL learners and whether EFL learners’ attitude and opinions towards teachers’ code-switching in grammar instruction are positive or negative are examined in this study.

1.2. Research questions and hypotheses
In line with the above-mentioned purpose of the study, the researchers attempted to answer the following research questions which were motivated by the research gap on the effectiveness of code-switching on grammar instruction.

1. Does teacher’s code-switching have a significant impact on the acqui-
sition of object relative clauses by intermediate EFL learners?

2. Does teacher’s code-switching have a significant impact on the attitudes of intermediate EFL learners toward teacher’s code-switching?

The following null and alternative hypotheses were derived from the research questions which are empirically analyzed and tested later in the study:

1. Teacher’s code-switching has no significant impact on the acquisition of object relative clauses by intermediate EFL learners.

2. Teacher’s code-switching has no significant impact on the attitudes of intermediate EFL learners toward teacher’s code-switching.

2. Review of Related Literature

Code-switching is deemed to be a widespread phenomenon in foreign language contexts and bilingual communities. In simple terms, code-switching is regarded as language alteration. Gumperz (1982, p. 59) defined code-switching as the “juxtaposition within the same speech exchange of passages of speech belonging to two grammatical systems or subsystems”.

According to Heller (1988), code-switching is when a person mixes two languages in a single sentence or a conversation. Valdes-Fallis claims that people can mix words, phrases and clauses. When one person switches between two languages, the person is bilingual. According to Baker (2006), a bilingual person can use two different languages, but one of these is often the dominant one. She suggests that some bilinguals are active in both languages whereas other bilinguals are passive, and their skills in one or both languages are less developed. Baker (2006) also suggests that there are many dimensions of bilingualism. One of the dimensions is called Elective bilingualism, which means that a person can choose to learn a new language, such as Swedish students learning English in the classroom. The type of conversation that we call code-switching today was previously known as a bilingual’s way to choose when s/he wanted to use a certain language. S/he could use one language on a certain occasion and another language on another occasion.
Crystal (1987) suggests that code or language switching occurs when an individual who is bilingual alternates between two languages during his/her speech with another bilingual person. A person who is bilingual may be said to be one who is able to communicate, to varying extents, in a second language. This includes those who make irregular use of a second language, are able to use a second language but have not for some time (dormant bilingualism) or those who have considerable skill in a second language (Crystal, 1987). This type of alteration, or code switching, between languages occurs commonly amongst bilinguals and may take a number of different forms, including alteration of sentences, phrases from both languages succeeding each other and switching in a long narrative.

A number of researchers (Lai, 1996; Cole, 1998) have argued that code switching can be a useful tool in assisting English language teaching and learning process. Others like Skiba (1997) see an opportunity for language development because code switching allows the effective transfer of information from the senders to the receivers. Tien and Liu (2006) contended that low proficiency students considered code-switching in their EFL classes as helpful towards gaining better comprehension especially when providing equivalent comprehension as well as giving classroom procedures.

Ellis (1994), Cook (2001), Richards & Rodgers (2001) and Widdowson (2003) who have been researching second language teaching and learning claim that, although exposure to the target language can ensure success, the exposure may not work in every classroom. It has been argued that English only classroom would only lead to frustration since the input is incomprehensible to the learners.

Braga (2002), conducted a study on humor in a beginner EFL classroom. In the study he indicated that participants’ use of code-switching was used as a strategy which signals humorous situations through correcting activities. Rolin-Ianziti and Brownlie (2002) conducted a study on 5 French classes and 4 teachers. They adapted quantity and qualitative analyses, and came to the conclusion that code-switching included three functions:

1) Transition
2) Meta-linguistic uses

3) Communicative uses

Storch and Wiggleworth (2003) conducted a study to examine the use of L1 in writing assignments and problem-solving among adult L2 language learners. Furthermore, the results identifies the following uses of mother tongue in the classroom: classroom management, language analysis and presenting rules that govern grammar, giving instructions or prompts, explaining errors, and checking comprehension.

listening activities, while speaking causes to facilitate the linguistic development of learners.

Lin (2013) suggested that both teachers and students code-switched to a larger extent in informal situations whereas the target language dominated in formal ones. Later studies show that code-switching is used to create close relationships between students and their teachers (Lin 2013; Jingxia 2010) and that students find classroom interaction more natural and easy when code-switching is allowed (Cook 2001, p. 413). This comfortable atmosphere that code-switching can contribute to is important in the teacher-student relationship since it gives them an opportunity to communicate in a more informal way where the risk of misunderstandings due to L2 shortcomings can be avoided (Simon 2001). In formal situations code-switching can be used to make the teaching more effective. When a teacher explains what is said in the curriculum or another academic text it can be useful to translate or explain some concepts further in the students’ L1 (Lin, 2013, p. 202; Jingxia 2010, p. 21). Code switching also leads to more efficient teaching for the simple reason that the students understand faster and more thoroughly.

A number of studies of CS in L2 classrooms have been undertaken which have generally identified the pedagogical functions of classroom talk and which broadly belong to a form-function or discourse analysis (DA) tradition. Ferguson (2003, p. 39) provides an overview of some recent, significant studies of classroom CS using the following three categories:

1) CS for curriculum access (e.g. to help pupils understand the sub-
ject matter of their lessons). Those studies (Lin, 1996; Martin, 1999) which examine the bilingual negotiation of the meaning of classroom texts belong to this category. The common point these studies illustrate is “the significant role of CS in providing access to English medium text and in scaffolding knowledge construction for pupils with limited English language resources” (Ferguson, 2003). As an example, Martin (1999) analyses an extract from a grade 4 geography class in Brunei in an English-medium school which illustrates how the teacher switches from English to Malay in order to “encourage and elicit pupil participation”, “clarify the meaning of certain sections of text”-a process that Martin (1999, p. 53) refers to as “unpacking the meaning”-and “demarcate reading the text from commentary on it”.

2) **CS for classroom management discourse** (e.g. to motivate, discipline and praise pupils and to signal a change of footing). The studies which fall into this category (e.g. Canagarajah 1999; Lin 1996) specifically analyze CS which “often contextualize a shift of frame (Goffman, 1974) away from lesson content and towards some ‘off-lesson’ concern-to discipline a pupil, to attend to latecomers, to gain and focus pupils’ attention” (Ferguson 2003). CS may also, as Ferguson states, “demarcate talk about the lesson content from what we may refer to as the management of pupil learning; that is, negotiating task instructions, inviting pupil contributions, disciplining pupils, specifying a particular addressee, and so on”. Under the same heading of classroom management, Ferguson (2003) highlights the use of CS as an “attention-focusing device” (Merritt, 1999); that is, the code contrast functions to redirect pupils’ attention -very often at the opening of a new topic.

3) **CS for interpersonal relations** (e.g. to humanise the affective climate of the classroom and to negotiate different identities).

The studies that concentrate on this function of CS (Adendorff, 1993; Merritt, 1999) investigated the social and affective classroom environment where teachers and learners negotiated relationships and identities. Ferguson (2003, p. 43) clarifies this function as follows:

In many classrooms, English indexes a more distanced, formal teacher-pupil relationship and the local language . . . a closer, warmer more
personal one. To build rapport with individual pupils, create greater personal warmth and encourage greater pupil involvement, the teacher may, therefore, when the occasion is suitable, switch to the local language.

Within the debate about allowing the use of the L1 in FL classrooms, Liebscher and Dailey-Ocain (2005) analyzed code-switching patterns between English and German as constitutive of bilingual language practice. They focused on student patterns of code-switching in one content-based German language classroom, in which applied linguistics is the subject matter of the course. Following the interactional model of code-switching suggested by Auer (1998), Liebscher and Dailey-Ocain (2005) showed that while some of these learners’ code-switches were participant related, they also used code-switching in discourse-related functions previously identified only in teacher talk and in non-institutional conversation among bilinguals. They found that participant-related uses largely addressed the roles of students and teacher in the classroom and the teaching context, whereas discourse-related uses clearly resembled bilingual practices outside the classroom environment.

3. Method

3.1. Participants
In total 54 participants at intermediate proficiency level were selected out of 82 students after taking the reading and writing sections of a Preliminary English Test (PET). The criterion for selection of the participants was obtaining a score within the range of one standard deviation below and above the mean. They were all EFL learners at the Jamea Language Institute in Tabriz. All the participants were at the intermediate level.

There were two independent groups and the number of participants in each group was the same (i.e., there were 27 participants in each group). All the participants had Iranian nationality and were considered to be typical learners of English as a foreign language. The ages of the participants ranged from 14 to 23 and their average age was measured to be 18. Since the study was conducted at the Jamea Language Institute, in Tabriz, there were only female participants within the two selected intact groups of the study. The proficiency level of the learners was
specified at the outset of the study. All the participants were at the intermediate level and those who were beyond or below the intermediate level were excluded from the study. In other words, the outliers whose proficiency levels were markedly higher or lower than the whole group were eliminated from the study.

3.2. Instruments
Different kinds of materials and instruments were used in this study. Indeed, the materials used in the study can be categorized as follows:

- Testing materials
  - PET as a proficiency test
  - Pre-test and post-test
- Teaching materials:
  - Explicit grammar instruction (+code-switching)
  - Explicit grammar instruction (- code-switching)
- Questionnaire:
  - An 18-item questionnaire used for surveying EFL learners’

3.2.1. Proficiency test
Owing to some executive problems, it was impossible to use the complete version of PET. Hence, it was modified to include the following sections:

The reading and writing parts of a Preliminary English Test (PET) was used in the present study to check the proficiency of the participants and to homogenize the participants within the intact groups. The participants were given one and a half hour to complete both reading and writing parts. The objective of this test was to make sure that the groups are homogeneous and thus comparable.

3.2.2. Teaching materials
The teaching material included in the study was related to teaching a problematic grammar structure, namely object relative clauses. The examples of this structure were drawn from different grammar books based on the experience of the researchers and other teachers who themselves
taught grammars, researchers decided about the type of grammar points and one of the researchers taught them in both groups. The teaching material included explicit grammar instruction.

Not unlike the selection of the sample participants, the choice of the linguistic target for the study was based on a meticulous procedure. Inasmuch as the first research question of the study was concerned with the effectiveness of instruction on acquiring a problematic structure of English language, it was essential for the researchers to select a complex structure as the target of the instructions. The target structure in the present study was object relative clauses. The researchers did not select the target structure subjectively. The selection of the target structure as mentioned previously was based on consulting of researchers with other teachers and professors.

3.2.3. Pre-test and post-test
Based on the design of the study, a pre-test and a post-test were included in the study. The tests were designed to evaluate the participants’ knowledge of the selected target structure of the study both before and after the treatments. In other words, the pre-test was intended to check the awareness of students of the target structure at the outset of the study and the post-test was designed to examine the achievement of the participants at the end of the study in the two groups. A test with 30 items was designed by the researchers based on the materials to be taught in the class. All the items included in the test were multiple-choice format. The reliability of the test scores was calculated by Kuder-Richardson 21 formula. KR-21 reliability index for the test scores was 0.79. Since the correlation coefficient (r) is more than standard level (the standard level is 0.7) pretest and post test have acceptable reliability.

3.2.4. The questionnaire
As mentioned at first, a secondary purpose of the study was to survey the sample EFL learners’ attitudes and opinions toward teacher’s code-switching while teaching problematic grammar structures. Hence, the best instrument required for surveying participants’ attitudes and opinions was a questionnaire. An 18-item questionnaire was designed by the researchers in Farsi (the official language in the context of the
study). The justification for designing the questionnaire in Farsi was that it was easier for the participants to understand and answer the items in Farsi than in English. The questionnaire was developed by the researchers themselves and its content validity validated by three experienced teachers of English in different language institutes in Tabriz that is, they checked the questions clarity and suitability. Cronbach’s alpha was used as the reliability coefficient to check the degree of reliability of the items which returned an internal consistency index of 0.82, Since the correlation coefficient (r)is more than standard level ( the standard level is 0.7 ) questions have acceptable reliability.

3.3. Procedure
The present study was conducted at Jamea Language Institute in Tabriz. It was considered to be both a quasi-experimental study and a survey study on the efficacy of code-switching in teaching grammar to intermediate EFL learners.

The study was carried out based on a predetermined sequence and procedure. At the outset of the study, the researcher introduced the purpose of the study to the participants and asked them to cooperate with her. The students who did not have the motivation to cooperate and participate in the project were eliminated from the study. Then, the researcher gave the reading and writing parts of a PET to the participants to homogenize them. The proficiency test papers were scored and according to the test results, the participants’ were labeled intermediate learners of EFL. Those participants who were too weak or too strong (outliers) (i.e., those students whose scores were not between one standard deviation below and above the mean) were eliminated from the study. The test of homogeneity was given during the first session of the study. There were two intact classes to which the homogeneity test was given. The selected participants were randomly assigned into two groups of control and experimental.

In the next session, the researchers gave the pre-test to both groups. The pre-test papers were scored so that they can later be compared with that of the post-test.

Having given the pre-test, the researcher gave the respective treat-
ments within each independent group as it was mentioned above. The treatment period lasted for 10 sessions and each session was lasted for one hour and 15 minutes. Two sessions per week was held during which a different type of teaching treatment was given to each independent group with regard to teacher’s code-switching:

- Explicit teaching of object relative clauses with teacher’s code-switching
- Explicit teaching of object relative clauses without teacher’s code-switching

The feature distinguishing the teaching treatments given to the two groups was related to code-switching. In the experimental group, explicit grammar instruction was used along with the teacher’s code-switching. It means that when the teacher felt that a participant or a group of them encountered a problem in understanding the material under the study, switched to Farsi in order to make the issue clearer for the participants. However, in the control group, explicit grammar instruction was given only in English which was the medium of instruction.

The third phase of the study was conducted after giving the treatment. In other words, the session following the last treatment session, the post-test was given to both the experimental and control groups. It included the same multiple-choice questions on the target structure which were given in the pre-test. The results of the post-test were intended to be compared with those of the pre-test to find whether the students have improved their knowledge of the selected grammatical structure (object relative clause). Then, the questionnaire measuring participants’ attitudes and opinions toward teacher’s code-switching was distributed for the experimental group.

3.4. Design of the study
The present study was deemed to be a quasi-experimental study into the efficacy of code-switching on enhancing the acquisition of a problematic grammatical structure by EFL learners. Also, this study surveyed and examined EFL learners’ attitudes and preferences on teachers’ code-switching in the experimental classroom teaching. Therefore, the following independent and dependent variables were examined in the present
study:
• Independent variable:
  ◦ Code-switching used as a technique in grammar instruction;
• Dependent variable:
  ◦ The acquisition of object relative clauses as a problematic grammar structure;
  ◦ The attitudes of the learners toward the code-switching of the teacher.

3.5. Data analysis
As stated above, the main concern of the present study was to investigate the effect of switching the code from L2 (English) to Farsi on learners’ acquisition of a complex syntactic structure of English, namely object relative clauses as well as their attitudes toward the teachers’ code-switching. Therefore, an ANCOVA was employed to analyze the elicited data so that a reasonable answer could be given to the posed research questions. This part provides the results of the related analyses and discusses their interpretations.

4. Results

4.1. The results of the English language proficiency test
As it was stated above, the reading and writing sections of a Preliminary English Test (PET) was used to homogenize the participants of the study. To select the participants, all initial 82 students took part in PET, and students whose scores were between one standard deviation below and above the mean were selected. Table 4.1 shows the descriptive statistics of the participants’ PET scores.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PET</td>
<td>82</td>
<td>25</td>
<td>60</td>
<td>44.71</td>
<td>9.467</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>82</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

As Table 4.1 shows, overall mean and standard deviation of the initial
participants’ PET scores were 44.71 and 9.467, respectively. Therefore, from among 82 students, 54 students whose scores were between 36 and 54 were chosen as the participants of this study.

4.2. Descriptive statistics for the control group

Table 4.2, reflects the descriptive statistics for the participants’ object relative clause (ORC) test in the control group.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORC Pre-Test in Control Group</td>
<td>27</td>
<td>9</td>
<td>30</td>
<td>17.15</td>
<td>6.131</td>
</tr>
<tr>
<td>ORC Post-Test in Control Group</td>
<td>27</td>
<td>10</td>
<td>30</td>
<td>21.30</td>
<td>6.132</td>
</tr>
</tbody>
</table>

As it is evident in Table 4.2, the participants’ ORC pre-test mean score in the control group was 17.15 with the standard deviation of 6.131, and their ORC post-test mean score group was 21.30 with the standard deviation of 6.132.

4.3. Descriptive statistics for the experimental group

Table 4.3, Presents the descriptive statistics for the participants’ ORC test and attitudes toward code-switching scores in the experimental group.

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ORC Pre-Test in Experimental Group</td>
<td>27</td>
<td>7</td>
<td>30</td>
<td>17.41</td>
<td>7.132</td>
</tr>
<tr>
<td>ORC Post-Test in Experimental Group</td>
<td>27</td>
<td>15</td>
<td>30</td>
<td>23.81</td>
<td>4.820</td>
</tr>
<tr>
<td>Attitude Post-Test in Experimental Group</td>
<td>27</td>
<td>75</td>
<td>90</td>
<td>83.15</td>
<td>4.936</td>
</tr>
</tbody>
</table>
As Table 4.3, indicates, it has been found that participants’ mean score in the ORC pre-test in the experimental group was 17.41 with the standard deviation of 7.132, and their mean score in the ORC post-test was 23.81 with the standard deviation of 4.820. In the attitude questionnaire, the mean score was 83.15 with the standard deviation of 4.936.

4.4. The results regarding the first research hypothesis

The first research hypothesis of the study aimed to investigate the effect of teacher’s code-switching on the acquisition of a problematic grammatical structure of object relative clauses by intermediate EFL learners.

In order to make sure about the normal distribution of the scores in both of the control and experimental groups, the researcher ran a One-Sample Kolmogorov-Smirnov Test on four sets of scores. Table 4.4, presents the results of this test.

**Table 4.4:** Kolmogorov-smirnov test normality check of ORC pre-test and post-test scores in control and experimental groups

<table>
<thead>
<tr>
<th></th>
<th>ORC Pre-Test in CG</th>
<th>ORC Pre-Post-Test in EG</th>
<th>ORC Post-Test in CG</th>
<th>ORC Post-Test in EG</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>27</td>
<td>27</td>
<td>27</td>
<td>27</td>
</tr>
<tr>
<td>Normal Parameters(^a,b)</td>
<td>Mean</td>
<td>17.15</td>
<td>17.41</td>
<td>21.30</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
<td>6.131</td>
<td>7.132</td>
<td>6.132</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
<td>.130</td>
<td>.109</td>
<td>.115</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
<td>.130</td>
<td>.109</td>
<td>.102</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
<td>-.092</td>
<td>-.082</td>
<td>-.115</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>.675</td>
<td>.567</td>
<td>.597</td>
<td>.614</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.753</td>
<td>.904</td>
<td>.869</td>
<td>.845</td>
</tr>
</tbody>
</table>

\(^a\) Test distribution is Normal.
\(^b\) Calculated from data.

As it is indicated in Table 4.4, P-value for each set of scores is higher than 0.05; therefore, all sets of scores have normal distributions, and the parametric test of ANCOVA can be used.

In order to investigate the first research hypothesis and eliminate the effect of pre-test on interpreting the participants’ performance on the post-test, the researchers ran an analysis of covariance (ANCOVA) in the SPSS software version 17. One of the assumptions of the ANCOVA is the equality of the variances between groups. The equality of the
variances between two groups was checked by Levene’s test. Table 4.5 shows, the results of Levene’s test of equality of error variances.

**Table 4.5: Levene’s test of equality of error variances in ORC tests**

<table>
<thead>
<tr>
<th></th>
<th>F</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7.657</td>
<td>1</td>
<td>52</td>
<td>.098</td>
</tr>
</tbody>
</table>

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + ORC Pre-Test + Groups

From the above table it is clear that the underlying assumption of homogeneity of variance for the one-way ANCOVA has been met - as evidenced by $F(1, 52) = 7.657, p = 0.098$. That is, $p(0.098) > 0.05$.

As the relationship between the dependent variable (i.e., ORC post-test) and the covariate (i.e., ORC pre-test) should be similar for two groups, the homogeneity of regression lines was checked at the first stage the results of which are presented in Table 4.6.

**Table 4.6: Homogeneity of regression for ORC post-test in two groups**

Dependent Variable: ORC Post-Test

<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>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1550.887a</td>
<td>3</td>
<td>516.962</td>
<td>221.974</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>493.599</td>
<td>1</td>
<td>493.599</td>
<td>211.942</td>
<td>.000</td>
</tr>
<tr>
<td>Groups</td>
<td>90.808</td>
<td>1</td>
<td>90.808</td>
<td>38.991</td>
<td>.000</td>
</tr>
<tr>
<td>ORC Pre-Test</td>
<td>1463.651</td>
<td>1</td>
<td>1463.651</td>
<td>628.464</td>
<td>.000</td>
</tr>
<tr>
<td>Groups * ORC Pre-Test</td>
<td>48.911</td>
<td>1</td>
<td>48.911</td>
<td>21.002</td>
<td>.322</td>
</tr>
<tr>
<td>Error</td>
<td>116.447</td>
<td>50</td>
<td>2.329</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29140.000</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1667.333</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .930 (Adjusted R Squared = .926)

As it is shown in Table 4.6, the P-value is equal to 0.322 which is higher
than 0.05, so the interaction between the independent variable-teacher’s code-switching with two levels of switching and not switching-and co-variate (i.e., ORC pre-test) is not significant, and the assumption of the homogeneity of regression is accepted. Therefore, the ANCOVA could be performed.

With regard to the first null hypothesis of the study, that is, teacher’s code-switching has no significant impact on the acquisition of a problematic grammatical structure (object relative clauses) by intermediate EFL learners, an ANCOVA was conducted. The results of this analysis are shown in Table 4.7.

Table 4.7: Analysis of covariance (ANCOVA) for ORC scores

<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>Corrected Model</td>
<td>1501.975</td>
<td>2</td>
<td>750.988</td>
<td>231.621</td>
<td>.000</td>
<td>.901</td>
</tr>
<tr>
<td>Intercept</td>
<td>545.764</td>
<td>1</td>
<td>545.764</td>
<td>168.325</td>
<td>.000</td>
<td>.767</td>
</tr>
<tr>
<td>ORC Pre-Test</td>
<td>1416.346</td>
<td>1</td>
<td>1416.346</td>
<td>436.832</td>
<td>.000</td>
<td>.895</td>
</tr>
<tr>
<td>Groups</td>
<td>72.325</td>
<td>1</td>
<td>72.325</td>
<td>22.307</td>
<td>.000</td>
<td>.304</td>
</tr>
<tr>
<td>Error</td>
<td>165.358</td>
<td>51</td>
<td>3.242</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>29140.000</td>
<td>54</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>1667.333</td>
<td>53</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .901 (Adjusted R Squared = .897)

As it is shown in Table 4.7, the first line highlighted indicates that participants’ ORC pre-test is significantly and positively related to the ORC post-test (P < 0.05) with the magnitude of 0.895. The next line is the indicator of the main effect of the teacher’s code-switching on the dependent variable-ORC post-test. After adjusting for pre-test scores, there was a significant effect of the group, F(1,51)= 22.307, p < 0.05, partial $\eta^2 = 0.304$. As P-value is less than 0.05, the difference between the two groups is significant, and the positive effect of teacher’s code-switching on the acquisition of a problematic grammatical structure (object relative clauses) by participants is confirmed. Therefore, the first null hypothesis was rejected.
4.5. The results regarding the second research hypothesis

The aim of the second hypothesis of the study was exploring the impact of teacher’s code-switching on the attitudes of intermediate EFL learners toward teacher’s code-switching.

Concerning the second null hypothesis of the study, that is, teacher’s code-switching has no significant impact on the attitudes of intermediate EFL learners toward teacher’s code-switching. One sample Test was run. The results of this analysis are presented in Table 4.8.

<table>
<thead>
<tr>
<th>Table 4.8: One sample test</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-Sample Test</td>
</tr>
<tr>
<td>Test Value = 3</td>
</tr>
<tr>
<td>t</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>attitude</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4.9: Descriptive statistics analysis of questionnaire</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td>attitude</td>
</tr>
</tbody>
</table>

The table 4.8, testifies to the statistical significance of the treatment effect on the group attitude 95% confidence, t = 5.53; df = 21. However, in analyzing the questionnaire, having examined the t value and significance, one should look at the mean. If it is less than or equal to 3, the null hypothesis cannot be rejected, implying that a given treatment was not effective. If it is greater than 3, the null hypothesis is rejected. As Table 4.9 shows, the mean is greater than 3.4, allowing the researcher to reject the second null hypothesis.

5. Discussion

The purpose of this study was to find out whether switching the code from L2 to L1 has any significant effect on learners’ acquisition of a
complex syntactic structure of English, namely object relative clauses as well as their attitudes toward the teachers’ code-switching. The findings of the study indicated that teacher’s code-switching was effective both on learning object relative clauses by the participants and making their attitudes more positive toward the teacher’s code-switching.

The findings justify the role of code-switching in increasing learners’ psychological state in their English classes. It may be due to the anxiety-free atmosphere in the classroom which inspires them to take part more actively in the classroom activities. Thus, it can be concluded that learning success requires successful provision of comprehensible input to make certain that learners understand the intended content, including new concepts, skills and vocabulary and grammar which, as a result, would lead the students to successful accomplishment of the language tasks (Chi, 2000; Schweers, 1999; Tang, 2002).

In short, teachers’ code-switching is influential in providing a psychologically encouraging learning environment for the learners (Lai, 1996), providing a strong base to learners’ affective gratification. Exposure to code-switching gives learners the opportunity to get a head start towards effective and prosperous learning and to gradually become users of the target language (Chi, 2000; Cole, 1998; Schweers, 1999).

In summary, the participants’ success in the experimental group reflects their ability to use object relative clauses effectively as a result of understanding of input generated by the teacher. An English classroom without code-switching, thus, cannot always ensure comprehensible input. Therefore, code-switching by the teacher should be taken into account as a form of teaching strategy (Cook, 2001; Sert, 2005; Skiba, 1997).

The findings of the present study were consistent with the results of Makulloluwa (2013) who revealed that the majority of the students demonstrated a favorable disposition towards the use of L1 since they believed it facilitates language acquisition by making the input more comprehensible and also by lowering the affective filter. The results were also in line with Johansson’s (2013) findings. She indicated that in grammar instruction classes the majority of the students preferred a combination of English and Swedish.
6. Conclusion

Teachers’ code-switching in the language classroom is a usual practice in most language teaching contexts world-wide as can be observed in different studies (e.g., Canagarajah, 1995; Eftekhari, 2001; Macaro, 2014; Merritt, Cleghorn, Abagi, & Bunyi, 1992; Raschka, Sercombe, & Huang, 2009; Then & Ting, 2011). This practice is mostly common when the teacher is competent in learners’ first language or has a common first language with the learners. Previous research has indicated that teachers’ code-switching takes place in different forms, from adding a single word of a language into an utterance in another language to alternately repeating utterances in various languages. In studies of classroom context, code-switching was seen in almost all classroom situations, for instance, managing the classroom, checking understanding, providing explanation, and socializing with students. It has several functions, both instructional and social, and is driven by different factors such as classroom requirements, learners’ language ability, and learners’ motivation (Eftekhari, 2001; Then & Ting, 2011; McLellan, 2009).

Nevertheless, over-translation of instruction into Farsi should not be encouraged except for some cases, e.g. stressing instruction or explaining complicated concepts, or rules or information. The reason is that teachers’ repetition through translation may lead to learners’ strict reliance on their teachers’ use of Farsi, and this does not aid to expose learners to as much English as possible. Learners are not likely to feel that they are in an English classroom environment if there is always translation into Farsi. Furthermore, teachers’ over-translation into Farsi may result in learner boredom, and demonization of them to learn English. Therefore, English-only use can be encouraged for teachers when they deal with classroom routines. This is since the teachers’ instructions on classroom routines are used customarily and repeatedly by the teachers and are thus very familiar to learners.

References


