Effect of Corrective Feedback on the Acquisition of English Prepositions of Movement and Place in Third-grade High School EFL Learners' Grammar Performance

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Abstract
This study investigated the effects of corrective feedback (CF) on the acquisition of English prepositions to find out which one would be more effective for third-grade high school learners in their grammar performance. This study also examined declarative and interrogative recasts to see which one the participants preferred to improve their grammar performance. To this end, 75 out of 130 female students at the intermediate level in Khorramshar took part in this study. The participants were randomly assigned into one control and two experimental groups. All three groups took the same pre and posttests; however, the treatment was different. The recast group received CF in the form of recast and the other in the form of metalinguistic clues. The control group only received general comments, like good, bad, etc. The results indicated that both experimental groups improved in preposition recognition and production in their grammar performances. The findings also showed that there was no significant difference between the students' performance in experimental groups, but metalinguistic CF was more helpful. A careful calculation using a questionnaire based on 5-points Likert Scale showed that there was no significant difference between the participants' preference for two types of recast by the group receiving recasts.

Keywords: Corrective feedback, metalinguistic corrective feedback recast, prepositions of movement and place, interrogative recast, declarative recast

Introduction
Corrective Feedback (CF) is one of the issues in second language acquisition which has grown to be a major concern among theoreticians and practitioners (Ellis, 2009). According to Ellis (2009), CF is viewed as a means of raising learners' motivation and ensuring linguistic accuracy by both structural and communicative approaches and also it is considered as a correcting technique as contributing to language learning in behaviorist and cognitive theories of L2 learning. He also mentioned that there are still a number of controversies related to the place of corrective feedback in SLA and language pedagogy. These disagreements addressed such issues as whether, what, how and when to correct learners' errors. SLA literature introduces various definitions of corrective feedback. For instance, Ellis (2008, p.958) defines it in second language acquisition as “information given to learners which they can use to revise their interlanguage”. Sheen (2007) considers corrective feedback as a teacher's move to lights up learners' awareness to the accuracy of grammatical structures s/he has produced.

Many researchers have investigated the role of corrective feedback and its effects on different aspects of second language acquisition (e.g., Lyster & Ranta, 1997; Sheen, 2004). Panova and Lyster (2002) also suggest that certain CF types can assist grammar improvement regarding the types of information provided to the students through CF and during developing process. In addition, Lyster and Ranta (1997) classified CF into six categories which
have been widely accepted by other studies (e.g., Ellis, 2009 & 2013; Sheen, 2007). This comprehensive taxonomy includes such types of corrective feedback as explicit correction, clarification request, recast, metalinguistic feedback, elicitation and repetition. Recasts and metalinguistic feedback are chosen for this study because they occur frequently during classroom interaction and differ in the level of explicitness and the way of correction (Sheen, 2004; Lyster, 1998a).

This study investigated the role and the effects of two main techniques of corrective feedback, namely recasts (implicit) and metalinguistic (explicit) on the acquisition of English prepositions of movement and place to see which one would be more effective for third-grade intermediate learners' preposition recognition and production in their grammar performance. This study also examined declarative and interrogative recasts to see which one the learners preferred to be used by the investigator to improve their grammar performance, namely recognition and production, because there are also disagreements between some scholars about the efficacy of the two types of recast. For example, Lyster (1998b) stated that interrogative form is used as confirmation checks. Sheen (2006) also stated that students mostly use declarative recasts to repair their errors. She also pointed out that interrogative recasts were not beneficial because they did not lead to a high level of repair.

The present study addressed recast and metalinguistic feedback and their probable effects on the acquisition of prepositions (recognition and production), since prepositions are the biggest group of little words and they have different important semantic functions and are usually overused by learners, as well (Mahmoodzadeh, 2012). Teaching prepositions is a difficult and complex process as some prepositions have one form and different functions and meanings while there are not fixed rules to help learners to choose the correct preposition (Swan, 1988). It is also worth to mention that many studies have been done to investigate the effects of corrective feedback on different grammatical elements; however, little work has been done on prepositions (e.g., AlAjmi, 2015; Kassim& Luan-Ng, 2014). This study also took into account two types of recasts: declarative and interrogative to see which one the learners prefer to be used by the investigator to improve their grammar performance regarding preposition recognition and production.

**Literature Review**

Most researchers, theoreticians and methodologies in ESL and language teaching believe that it is necessary to draw the ESL/EFL learners' attention to the forms and grammatical aspects of the target language. However, there is also a controversial issue on how or in what way to draw this attention to the grammatical points and forms. Some researchers suggested the implicit techniques of corrective feedback, but others maintain that the effectiveness of implicit technique is not the same as explicit one. In language teaching, feedback is an important part through which students can know about their language development and performance (Good & Brophy, 2000). Corrective feedback, as a type of teacher's feedback, refers to utterances which show learners that their output is erroneous (Lightbown & Spada, 2006). Although a number of researchers prefer the term negative feedback for this type of techniques in SLA, corrective feedback, error treatment, error correction and negative evidence have been used interchangeably (e.g., Ammar, 2003; Ortega, 2001).

Ammar (2003) argues that error correction is different from negative feedback because it doesn't entail elicitation of correct forms. According to Ammar (2003), “negative feedback is not based on the assumption that leads to error correction, so the two terms should not be used interchangeably” (p.5). However, one can argue that these differences are just terminological and
making a distinction between them is not revealing and differences can be attributed to the purposes of a study that focuses on errors (Golshan, 2014). Corrective feedback is one of the debatable issues among teachers and researchers and has played an important role in the field of SLA and the findings of researches which have been done in this field have been taken as empirical evidence for or against the theoreticians’ arguments.

There are always controversies depending on the theories and their methodological perspectives. So, there are significant interests in CF on both theoretical and pedagogical grounds. On the theoretical ground, there has been a debate over whether CF is necessary and beneficial or not. In fact, it can be attributed to the role of negative and positive evidence in second language acquisition. As Gass (1997) claimed language learners have access to positive and negative evidence. Positive evidence shows that certain structure is possible and grammatical in a language and negative evidence shows a kind of impossibility. Corrective feedback can be a source of positive and negative evidence or one of them based on its explicitness or implicitness.

According to Ellis (2008), almost all second language theoreticians believe that the positive evidence is important but the views on the importance of negative evidence are different. Krashen (1982) is one of the scholars who argues against CF and claims that positive evidence alone is sufficient for learners to acquire L2. Some researchers, on the other hand, argue that negative evidence plays a facilitative and even crucial role in SLA because it draws the learners' attention to correct linguistic forms (Long, 2006; Gass, 1997). According to interaction hypothesis, implicit negative feedback such as recast, through negotiation for meaning, provides an opportunity for learners to attend linguistic forms (Long, 2006). Some researchers like Schmidt (2001) advocate CF and argue that unlike first language acquisition, SLA is a conscious process and corrective feedback helps the learner to notice the gap between the interlanguage and the target forms. Ellis (2009) provides a different perspective over CF in the light of interaction/cognitive views and also the socio-cultural theory. He mentions some general guidelines for using CF in language classroom based on the socio-cultural view. He also argues that the socio-cultural theory views CF as a form of social mediation that enables learners to perform independently. Some researchers (e.g., Sheen, 2006; Loewan, 2004) also attribute the importance of CF to the learners' uptake or response following the provision of corrective feedback. So, making the relation between CF and SLA clear is very crucial. A number of researchers have endeavored to conduct well-designed experimental studies of CF effect in SLA in order to find out whether CF can promote second language learning or not.

**Research Questions**

The present study was an attempt to answer the following research questions:

**RQ1.** Does CF affect third-grade high school learners' prepositions acquisition (recognition and usage) in their grammar performance?

**RQ2.** Is there any difference between the acquisition of the learners who learn prepositions of movement and place (recognition and production) through recasts and those who do not receive this type of correction?

**RQ3.** Is there any difference between the acquisition of the learners who learn prepositions of movement and place (recognition and production) through metalinguistic corrective feedback and those who do not receive this type of correction?

**RQ4.** Which of these two types of recast; namely, declarative and interrogative, is more preferred by third-grade high school learners' to improve their preposition acquisition (recognition and production) in their grammar performance?
Method

Participants
The participants of this study were 75 out of 130 female EFL learners from two high schools in Khorramshahr, Iran. The participants were all in intermediate level and their age range was between 16 up to 17. All participants were either Persian speakers or bilinguals of Arabic and Persian. They were taking English as a school subject. They had already passed the English courses in grade 2 successfully with good scores, and based on their declaration no one was attending English courses in institutes out of school, nor was exposed to English in any setting outside their education. Then, they were randomly assigned to two experimental groups and one control group, each including 25 participants.

Materials
In all 10 treatment sessions, each 45 minutes, the movement and place prepositions were taught through both oral and textual modalities for example by oral repetition and text construction such as using preposition in sentences and finding them in a text as well as through demonstration for example action, gestures, and pictures. The researcher decided to use oral, textual and demonstration modalities to teach place and movement preposition because these aides can always be used by teachers as a means to introduce the meaning and the use of prepositions and to facilitate students' understanding of the meaning and the use of place and movement prepositions (Abkhoo, Gorjian & Pazhakh, 2014). Some recognition and production drills were given to the participants according to the use of movement and place prepositions and then both the written and also oral errors committed by learners were corrected through the use of the two mentioned corrective feedback techniques: recast and metalinguistic clues in oral form. These drills were selected from Grammar way 2 and 3 published by Express Publishing (2006) and also from English book 3 published by Iran's Ministry of Education (2010) for high schools in Iran. The Grammar way 2 and 3 (2006) were selected by the researcher because they contain various and helpful drills and activities especially about place and movement prepositions. The researcher preferred to use a book which was less used by other researchers. The learners' English book 3 (2010) was also selected by the researcher because this book is the official English book published by Iran's Ministry of Education and is taught in Iran's high schools, too and the participants were familiar with it.

Instrumentation
Four instruments were used in the process of the current study. The first instrument which was used in order to homogenize the sample was the Oxford Quick Placement Test or OQPT (2007). All 130 participants took this placement test a week before the study was conducted. This test consisted of sixty multiple-choice items. According to the index of homogeneity in OQPT (2007), those participants whose scores fell within 30 and 39 out of 60 were in intermediate level. Through this homogeneity test, 75 participants out of 130 students were selected.

Then a teacher-made pretest was given to the participants to test their knowledge of prepositions. It included 30 recognition and 30 production items focusing on prepositions, and the participants had to answer them in 60 minutes.

A week after the last treatment session, a teacher-made post-test was given to the participants. This test was similar to the pre-test in terms of the form and the difficulty level. The reliability indexes of both pre-test and post-test were calculated through a pilot study based on Cronbach Alpha since the items were of different types. The piloted test data were calculated
with SPSS 17. The result of the analysis indicated an approximate reliability of 0.83 for the pre-
test and 0.84 for post-test.

The face, content, and construct validity were also obtained through consulting with three
experts as the inter-raters. According to the face, content, and construct validity checklists
(Bachman & Palmer, 1996) the raters validated the test items. The validity of the pretest and the
posttest were examined two times by these experts with two weeks as the time interval. Then, the
correlation of these reported scores were calculated to show there is not any significant difference
between experts' reports about the face, content, and construct validity of the pretest and the post-
test (r = 0.75).

To answer the fourth research question, the recast group received a declarative and
interrogative method of recast technique. After the last session the participants were given a
teacher-made questionnaire to extract their attitudes toward the types of recast and their
effectiveness. In fact, participants' feedback was analyzed in order to draw a pattern of
preferences. This questionnaire consisted of three main sections which encompassed thirty
certain related questions/statements with the nature of recast itself and two types of recast,
namely declarative and interrogative. The first section contained twelve questions/statements
about the nature of recast itself to determine the participants' perceptions. The second and third
sections, each of which with nine questions/statements addressed the fourth research question to
determine which type of recast participants prefer to be used by the teacher to improve their
grammar performance. The participants were asked to indicate their degree of agreement or
disagreement with nine different questions/statements. The response options for all questions in
the questionnaire were coded on a 5-point Likert scale including strongly disagree, disagree, no
idea, agree and strongly agree. This questionnaire was made by the researcher, so it was
necessary to measure its reliability and validity. The reliability of this questionnaire was testified
through pilot study using Cronbach's Alpha which indicated Alpha level of 0.84. Its face, content,
and construct validity were examined by two faculty members of Islamic Azad university of
Abadan twice with two weeks as the time interval by the use of validity checklists based on the
definition of recast, its nature, and its two types in Ellis's book (2008). Then the correlation of
these reported scores were calculated to show there might not be any difference between experts' 
reports about the face, content, and construct validity of this questionnaire (r = 0.78). It is worth
mentioning that because of better understanding and extracting the exact information, the items
of this questionnaire were back translated into Persian. The quality of translation was also
examined by two faculty members of Islamic Azad university of Abadan.

Procedure
The study started with three homogenized classes each including 25 EFL female learners.
These three classes from third-grade students were randomly selected as one control and two
experimental groups. All three groups were given a pre-test to determine their level of grammar
background knowledge, especially in case of using and recognizing prepositions. Then, ten
sessions as treatment sections started. In all ten treatment sessions, the movement and the place
prepositions were taught to the participants of all three groups through oral and textual modalities
for example by repetition and in text use as well as through demonstration for example, action,
gestures, and pictures.

Then, some recognition and production drills were given to the participants of all three
groups according to the use of movement and place prepositions and then errors committed by
the participants of the two experimental groups were corrected through the use of the two-
mentioned corrective feedback techniques: recast and metalinguistic clues in spoken form. The
errors committed by the control group participants were not corrected and their performance were generally commented on with such phrases as well-done, good, not bad and not good.

To answer the first three research questions of the study, the researcher had to use different types of corrective feedback, that is recast was used for one experimental group and Metalinguistic feedback was employed for the other experimental group. After the treatment sessions finished, a grammar post-test was given to all three groups. This test was similar to the pre-test in form and difficulty level.

To answer the last research question, the recast group received different types of recasts: declarative and interrogative during the treatment sessions. Then, regarding this question, the learners' preferences were gathered by the use of a questionnaire and calculated as mentioned in the instrument section. The participants had to answer the items of this questionnaire in thirty minutes.

**Data Analysis**

The scores obtained from both the pre-test and the post-test in the recasts, metalinguistic, and control groups were processed through the application of the statistical software SPSS 17. In order to determine the probable effects of CF on the acquisition of preposition of movement and place in learners' grammar performance for each group, the data were collected through the pre-test and the post-test. Descriptive statistics including means, standard deviations and variances of the scores were calculated. The data were analyzed via Paired Samples t-test to test the probable difference within the groups in the pre-test and the post-test. Then, a One-Way ANOVA was run to examine mean differences between the groups regarding the pretest and the post-test.

In order to find an answer to the fourth research question, the scores of the participants' preferences in recast group were calculated by the use of the questionnaire and according to 5-point Likert scale to observe which type of recast the participants preferred to be used by the researcher. To find the answer to the second part of the fourth question, the frequency of strongly agreement and agreement for each statement/question in the second section and the third section of the questionnaire were calculated to show the percentage and the main reason for the participants' preferences. It is worth mentioning that the second section of the questionnaire asked about interrogative and the third section asked about declarative recast.

**Results**

Collected data from pre and post tests for all participants were analyzed and the results obtained throughout the research and scrutinize the groups' pre and post-tests are presented in tables below.

**Table 1. One-Sample Kolmogorov-Smirnov Test**

<table>
<thead>
<tr>
<th>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</th>
<th>Pre control</th>
<th>Post control</th>
<th>Pre meta</th>
<th>Post meta</th>
<th>Pre recast</th>
<th>Post recast</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>25</td>
</tr>
<tr>
<td>Mean</td>
<td>19.0800</td>
<td>19.6800</td>
<td>19.120</td>
<td>27.2400</td>
<td>21.0800</td>
<td>26.7200</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>5.88019</td>
<td>5.7200</td>
<td>3.5627</td>
<td>5.06853</td>
<td>6.1630</td>
<td>4.81768</td>
</tr>
<tr>
<td>Most Differences</td>
<td>Extreme Absolute</td>
<td>.278</td>
<td>.238</td>
<td>.124</td>
<td>.147</td>
<td>.170</td>
</tr>
<tr>
<td>Most Differences</td>
<td>Positive</td>
<td>.278</td>
<td>.238</td>
<td>.124</td>
<td>.093</td>
<td>.170</td>
</tr>
</tbody>
</table>
Kolmogorov-Smirnov Z

<table>
<thead>
<tr>
<th></th>
<th>.154</th>
<th>.127</th>
<th>.101</th>
<th>.147</th>
<th>.094</th>
<th>.125</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.042</td>
<td>.119</td>
<td>.836</td>
<td>.653</td>
<td>.469</td>
<td>.831</td>
</tr>
</tbody>
</table>

a. Test distribution is Normal.
b. Calculated from data.

Table 1 shows that the statistics of scores is normal as the results obtained from using SPSS 17. In this case, the parametric statistics like One Way ANOVA and paired Sample t-test can be used. The descriptive statistics of the pretest are shown in Table 2.

Table 2. Descriptive Statistics (Pre-test)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std.</th>
<th>95% Confidence Interval</th>
<th>Std. Error</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Min</th>
<th>Max</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>control</td>
<td>25</td>
<td>19.08</td>
<td>5.88</td>
<td>16.6528</td>
<td>.1176</td>
<td>19</td>
<td>5.88019</td>
<td>16.50</td>
<td>21.50</td>
<td>13.00</td>
<td>33.00</td>
</tr>
<tr>
<td>meta</td>
<td>25</td>
<td>19.12</td>
<td>3.56</td>
<td>17.6494</td>
<td>.7125</td>
<td>19</td>
<td>3.56277</td>
<td>17.00</td>
<td>20.59</td>
<td>13.00</td>
<td>25.00</td>
</tr>
<tr>
<td>recast</td>
<td>25</td>
<td>21.08</td>
<td>6.16</td>
<td>18.5357</td>
<td>1.23</td>
<td>21</td>
<td>6.16387</td>
<td>18.00</td>
<td>23.62</td>
<td>11.00</td>
<td>33.00</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>19.76</td>
<td>5.34</td>
<td>18.5309</td>
<td>.6168</td>
<td>20</td>
<td>5.34193</td>
<td>18.00</td>
<td>20.98</td>
<td>11.00</td>
<td>33.00</td>
</tr>
</tbody>
</table>

Table 2 provides the descriptive statistics of the control, recast and metalinguistic groups in terms of participants (n), means, maximum and minimum scores. 75 students participated in this study. Their scores ranged from 11 to 33 out of 60 in the pretest. The results showed that the mean score of the pre-test in the control group was 19.08, in the metalinguistic group 19.12 and in the recasts group was 21.08. The standard deviation of each group in the pre-test was 5.88, 3.56 and 6.16, respectively. A One-Way ANOVA was run to discover the area of mean differences among these three groups of participants. The results of the One-Way ANOVA are presented in Table 3.

Table 3. One Way ANOVA (Pre-test)

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>65.360</td>
<td>2</td>
<td>32.680</td>
<td>1.150</td>
</tr>
<tr>
<td>Within Groups</td>
<td>2046.320</td>
<td>72</td>
<td>28.421</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2111.680</td>
<td>74</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3 shows the observed F (= 1.15) is less than the critical F (=2.75) with df = 2, 72, 74. It shows the difference among the groups is not significant at (p< 0.05). Thus, these three groups were homogenous regarding the pretest scores.
Table 4. Descriptive Statistics (Post-test)

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
<th>95% Confidence Interval for Mean</th>
<th>Minimu m</th>
<th>Maximu m</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
<td>Upper Bound</td>
<td></td>
</tr>
<tr>
<td>control</td>
<td>25</td>
<td>19.6800</td>
<td>5.72800</td>
<td>1.14560</td>
<td>17.3156</td>
<td>22.0444</td>
<td>13.00</td>
</tr>
<tr>
<td>meta</td>
<td>25</td>
<td>27.2400</td>
<td>5.06853</td>
<td>1.01371</td>
<td>25.1478</td>
<td>29.3322</td>
<td>16.00</td>
</tr>
<tr>
<td>recast</td>
<td>25</td>
<td>26.7200</td>
<td>4.81768</td>
<td>.96354</td>
<td>24.7314</td>
<td>28.7086</td>
<td>18.00</td>
</tr>
<tr>
<td>Total</td>
<td>75</td>
<td>24.5467</td>
<td>6.20874</td>
<td>.71692</td>
<td>23.1182</td>
<td>25.9752</td>
<td>13.00</td>
</tr>
</tbody>
</table>

Table 4 provides the descriptive statistics of the control, recast and metalinguistic groups in terms of participants (n), means, maximum and minimum scores in post-test. 75 students participated in this study. Their scores ranged from 13 to 37 out of 60 in the post-test. The results showed that the mean score of the post-test in the control group was 19.68, in the metalinguistic group 27.24 and in the recasts group was 26.72. The standard deviation of the Control, Meta, and Recast groups in the post-test were 5.72, 5.06 and 4.81, respectively. Since descriptive statistics cannot determine the significant differences among the groups, a One-Way ANOVA was run to discover the area of mean differences among these three groups of participants. The results of the One-Way ANOVA are presented in Table 5.

Table 5. One Way ANOVA (Post-test)

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>891.547</td>
<td>2</td>
<td>445.773</td>
<td>16.367</td>
<td>.000</td>
</tr>
<tr>
<td>Within Groups</td>
<td>1961.040</td>
<td>72</td>
<td>27.237</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2852.587</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5 shows that the observed F (=16.36) is greater than the critical F (F =2.75) with df = 2, 72, 74. It shows the difference among the groups is significant at (p< 0.05). Thus, these three groups are different regarding the post-test scores. The post-hoc Scheffe test was run to determine the potential differences among these three groups in the post-test. The results of this post-hoc test are displayed in Table 6.

Table 6. Post-hoc Scheffe test (Multiple Comparison)

<table>
<thead>
<tr>
<th>(I) VAR00005</th>
<th>(J) VAR00005</th>
<th>Mean Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>Meta</td>
<td>-7.56000*</td>
<td>1.47612</td>
<td>.000</td>
<td>-11.2497</td>
<td>-3.8703</td>
</tr>
<tr>
<td></td>
<td>Recast</td>
<td>-7.04000*</td>
<td>1.47612</td>
<td>.000</td>
<td>-10.7297</td>
<td>-3.3503</td>
</tr>
<tr>
<td>Meta</td>
<td>Control</td>
<td>7.56000*</td>
<td>1.47612</td>
<td>.000</td>
<td>3.8703</td>
<td>11.2497</td>
</tr>
<tr>
<td></td>
<td>Recast</td>
<td>.52000</td>
<td>1.47612</td>
<td>.940</td>
<td>-3.1697</td>
<td>4.2097</td>
</tr>
</tbody>
</table>
Recast | Control | 7.04000* | 1.47612 | .000 | 3.3503 | 10.7297 | Meta | -.52000 | 1.47612 | .940 | -4.2097 | 3.1697

* The mean difference is significant at the 0.05 level.

Table 6 shows the interaction and comparisons between the mentioned groups. The results show that the metalinguistic group was significantly different from the control group at the significance level (p< 0.05), but it is not significantly different from the recast group. In other words, the treatment had affected the performance of the metalinguistic group. However, compared to the recast group's improvement in the acquisition of movement and place prepositions, this effect was not significant.

In order to see if the observed differences within groups were statistically significant, paired sample t-test was applied. The results of within-group paired sample t-test for the three groups are presented in Table 7.

| Table 7. Within-Group Paired Sample t-Test(groups' pre and post-test) |
|---|---|---|---|---|---|---|---|---|---|
| Paired Differences | Mean | Std. Deviation | Std. Error Mean | Lower | Upper | 95% Confidence Interval of the Difference | Sig. (2-tailed) | t | df |
| Pair 1 precontrol | 5.43139 | .60000 | -2.84197 | 1.64197 | -.552 | 24 | .586 |
| postcontrol | 8.1200 | - | - | 10.2758 | 5.96417 | 7.77 | .000 |
| Pair 2 | 7.31938 | .64000 | -8.66129 | - | - | 24 | .001 |
| postmeta | 5.6400 | 1.46388 | 2.61871 | 3.85 | 3 | .000 |
| postrecast | 0 |

Table 7 indicates that the observed t of the control group (0.552) is less than the critical t (1.95) with df=24, thus the difference within the groups is not significant in pair1 (control group). Since the observed t of the metalinguistic group (7.77) is greater than the critical t (1.95) with df=24, the difference within the group is significant in pair 2 (metalinguistic group). The observed t (3.85) of the recast group is greater than the critical t (1.95) with df=24, thus the difference within the groups is significant in pair 3 (recast group), as well.

The results reveal that the participants' scores in the post test in pair 2 and 3 were significantly higher than their scores in the pretest and this difference can be attributed to the helpful role of the treatment employing recast and metalinguistic corrective feedback. Higher scores mean a higher level of learners' awareness of their grammar (the recognition and the production of the place and movement prepositions). It is worth mentioning that the differences between the pre and the post test in the metalinguistic group is more than that of the recast group and this shows the greater effect of metalinguistic corrective feedback in comparison with that of the recast. The results of the within-group paired sample t-test for the control group indicate that
the observed difference between the mean score of the pretest and the post test was not significant. In other words, the participants' scores in the post test in the control group are not significantly higher than their scores in the pretest at the significance level (p< 0.05). Moreover, the results of the within-group paired sample t-test for the control group reveals that the control group participants' did not improve the preposition recognition and production very much. Finally, the scores of the participants' preferences were calculated through the 5-point Likert Scale to observe which type of recast the participants preferred to be used by the researcher. In order to see if there was any significant difference in participants' preferences about interrogative and declarative recast within the recast group, the investigator applied a paired samples t-test. The descriptive statistics were also calculated. The results were shown in Tables 8 and 9.

Table 8. Descriptive Statistics (questionnaire)

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 1 declarative</td>
<td>32.6000</td>
<td>25</td>
<td>5.57524</td>
<td>1.11505</td>
</tr>
<tr>
<td></td>
<td>interrogative</td>
<td>33.4400</td>
<td>25</td>
<td>5.26846</td>
</tr>
</tbody>
</table>

Table 8 provides the descriptive statistics of the recast group in terms of participants (n), means, and standard deviation of scores about two types of recast, namely declarative and interrogative. The results showed that the mean score of the declarative recast was 32.60 and of the interrogative recast was 33.44. The standard deviation of each group was 5.57 and 5.26, respectively. To see whether the observed differences were statistically significant within groups, the investigator applied a paired sample t-test. The results of paired sample t-test for the two types of recast are presented in Table 9.

Table 9. Paired Sample t-test (questionnaire)

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>95% Confidence Interval of the Difference</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean Std. Error</td>
<td>Lower</td>
</tr>
<tr>
<td>Pair 1 declarative -e</td>
<td>4.61591 .92318</td>
<td>-2.74536</td>
</tr>
<tr>
<td>interrogative</td>
<td>-.8400</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 9 indicates that the observed t(0.91) is less than the critical t (2.06) with df=24, thus the difference within the groups is not significant at the significance level (p< 0.05). This result shows that there was no significant difference between participants' preferences about interrogative and declarative recasts. In fact, they preferred both to be used by the researcher.

To find an answer for the second part of the fourth question, the frequency of strongly agreement and agreement for each statement/question in the second section (interrogative
section) and the third section of questionnaire (declarative section) were calculated to show the percentage and the main reason for this agreement. The results are presented in Graph 1.

![Graph 1](image.png)

**Graph 1.** The percentage of agreement with two types of recast for each statement

Graph 1 shows that in interrogative form of recast, question number 4 (question/statement 16 in the questionnaire: *By using interrogative form, the teacher asks me to review my answers.*), had the high percentage (80%), and most of the participants agreed with this type of recast. Question number 5 (question/statement 17 in the questionnaire: *By using interrogative form, the teacher makes me to be an independent person.*) shows the less agreement (36%). Graph 4.1 also shows that in declarative type of recast question number 3 (question/statement 24 in the questionnaire: *By using declarative form, teachers can motivate me to think more to find the correct answer.*), had the high percentage (72%) of agreement among participants and the less participants' agreement belongs to question number 5 (question/statement 26 in the questionnaire: *By using declarative form, the teacher makes me to be an independent person.*) (38%).

**Discussion**

The results of the data analysis would lead to decide on the research hypotheses formulated in the present study. One of the main aims of this study was to find out the effect of corrective feedback strategies on the acquisition of place and movement prepositions in third-grade high school learners' grammar performance. The results of data analysis showed that there was no significant difference among the participants' grammar performance in the pre-test. In contrast, there was a significant difference between the performances of the three groups in the post-test. It could also be observed that although there was no significant difference between the two experimental groups, the participants in the metalinguistic group outperformed a little bit better than the recast group. The findings of the present study rejected the first hypothesis as clearly displayed in Table 4 and Table 6. That is both recast as an implicit feedback and metalinguistic clue as an explicit feedback were acted effectively in improving the participants' grammar performance regarding preposition recognition and production. Table 7 also revealed
the results of within-group paired sample t-test (for three groups' pretest and post-test). The learners of the metalinguistic and the recast group after ten sessions outperformed the control group. In other words, the control group participants did not improve their preposition recognition and production ability.

The reason behind this result could be the effectiveness of corrective feedback techniques on the acquisition of place and movement preposition. It is worth mentioning that the questions of pretest and the post-test focused on the recognition and production of place and movement prepositions. The other reason is that CF types could provide the learner with a highlighted input which can raise the learners' attention and this physical saliency can work for the betterment of language learning (Mohammadi, 2009). Owing to the fact that the control group did not receive the CF treatment, the lack of awareness about the prepositions in their grammar performance can be justifiable. This study is in line with a comparative study done by Mohammadi (2009) to compare the effect of recast and metalinguistic feedback in teaching and learning second language writing. Mohammadi's study (2009) focused on two structures: relative clauses and passive voices. The findings of the study indicated that although both types of CF proved efficient to some degree, the metalinguistic clues were more effective than the recast. Since metalinguistic feedback is also an explicit type, it can be considered as overt correction, as well. The results of some other researches (Carroll and Swain, 1993 cited in EL Tatawy, 2002) reiterate that implicit as well as explicit types of feedback were found to be beneficial, and both can lead to learning. However, the findings of the researchers mentioned above are also in contrast with the findings of Bitcher, Young, and Cameron (2005). In fact, Bitcher, et al. (2005) did not find any positive effect of corrective feedback in general. Likewise, Ferris (2006) stated, "The research based on the questions of whether error feedback helps students to improve their accuracy in the short run or overtime is inadequate as to the number of studies and inconsistent as to research design" (p.81).

Based on the results on Table 5 (ANOVA for the post-test) showed there were significant differences between the three groups in the case of the use of corrective feedback techniques. The groups' means in Table 6 (post hoc Scheffe) revealed that although metalinguistic feedback and recast were both effective in the acquisition of prepositions (recognition and production), the recast feedback was less helpful than the metalinguistic type in learners' grammar performance. So, the second null hypothesis was also rejected. That is, the recast group improved less than the metalinguistic, but outperformed the control group.

The results of Naderi's study (2014) are in line with the present study. The findings indicated that both explicit and implicit types of feedback were effective on listening self-efficacy; moreover, Naderi (2014) reported that the explicit feedback was more effective than the implicit type. The findings of this study are partly in agreement with Rassaei and Moinzade's study (2011). The researchers stated that while metalinguistic feedback was more effective than recasts in the post-test, recast had a more stable and enduring effect on participants' grammar performance. In contrast, the studies supporting recasts suggested that recast is better than explicit types of CF since it involves participants in guided learning and problem solving. In addition, recasts can lead to long-term acquisition and are learner-centered, i.e. they are dependent upon what the learners attempt to convey, and are inconspicuous, that is, they are not clearly visible nor attract attention (Lyster, Saito & Sato, 2013; Mackey & Goo, 2007; Trofimovich, Ammar & Gatbonton, 2007; Long, 2006; Leeman, 2003).

As indicated in Table 5 and Table 6, although there was not a significant difference between the metalinguistic and the recast group, the participants who received metalinguistic
feedback outperformed a little more than those who received recast feedback and outperformed more than the control group who do not receive any type of feedback.

The reason is twofold. One is that the participants may have been felt more comfortable with metalinguistic feedback when they were receiving the direct explanation about their inconsistencies in their performance. Second, being provided with the metalinguistic feedback technique, the participants did not have to take the risk of realizing (or not realizing) the implied feedback therefore the participants became more aware of the feedback on their errors and would consider the correction points in their later performance. This clearly led to the rejection of the third hypothesis.

The role of metalinguistic feedback for both implicit and explicit knowledge in the pretest and the post-test is in line with Schmidt's Noticing Hypothesis (2011) but different with Krashen's claim. Because this types of corrective feedback can raise the participants' awareness on their mistakes and can notice the gap in learning process. Schmidt (2011) also suggests that noticing has crucial role in the learning process. It is different with Krashen's claim suggesting that explicit correction of grammar would only improve explicit knowledge. According to Krashen's view (1981), the acquisition is a subconscious process which involves implicit learning while learning is conscious and takes place when the implicit instruction is provided. He believes that there is no role for error correction in the process of acquiring L2.

Moreover, the results of this study are in line with the study which was conducted by Rassaei, Moinzade, and Youhanaee (2012). Their research indicated that metalinguistic corrective feedback is more effective than recasts in promoting the acquisition of both implicit and explicit L2 knowledge.

The results of this part of the study as displayed in Table 8 and Table 9 (paired Sample t-test) indicated there was no significant difference between the participants' preferences about the two types of recast. As showed in Table 8, there was no significant difference between the mean scores of the participants' preferences about declarative and interrogative recast. Table 9 indicated that the difference within the groups is not significant at the significance level (p<0.05). In fact, these results showed the participants preferred both of these two types of recast to be used by the researcher. So, the fourth null hypothesis is retained. Although the careful consideration of the percentage of agreement for each question/statement showed these participants preferred interrogative recasts a little more than the declarative type, this preference was not significant.

In contrast to Sheen's view (2006) regarding the beneficial effect(s) of declarative recasts which can lead to a high level of repair compared with the interrogative one, the findings of this study support Mackey and Goo's study (2007), in which interrogative recasts were more accurately perceived than declarative recasts. The participants' preference for interrogative recast in the present study reveals that an interrogative recast is not ambiguous. This may be attributed to the fact that this form of recast raised the participant' awareness easily on their mistakes so that the participants could be fully aware of the types of error corrections employed by their instructor. This is in contrast with the findings of Loewen and Philip's (2006) study pertaining to the ambiguity of interrogative recasts.

The researcher wanted to know the exact reason of this agreement regarding the participants' preferences. It is worth mentioning that each question/statement contained a probable reason that shows these preferences. Thus, the frequency and then the percentages of the participants' agreement for each question/statement (16 - 30) were calculated to show the degree of these preferences as follow:
The results in Graph1 showed that the participants agreed with the question/statement number 4 (16 in the questionnaire: By using interrogative form, the teacher asks me to review my answers.)(80%) more than the others. This statement shows the agreement with the interrogative form of the recast because the participants think the interrogative form can encourage them to review their answers. The less degree of percentage (38%) regarding the participants' agreement was with the question/statement number 5 (17 in the questionnaire: By using interrogative form, the teacher makes me be an independent person.). In fact, this statement shows more disagreement. The participants believed that they couldn't be an independent person in the learning process if their teacher uses the interrogative form of the recast.

The same procedure was done with the rest of the statements/questions in the questionnaire (number 22-30). The results indicated that the higher agreement belonged to question/statement number 24 (3 in the graph: By using declarative form, the teacher can motivate me to think more to find the correct answer.)(72%). Regarding this statement/question, the participants believed that they could be more motivated to find the correct answer if their teacher uses the declarative form of the recast. Moreover, the less degree of the percentage (38%) shows the more disagreement. The results indicated that the higher disagreement belonged to question/statement number 26 (5 in the graph: By using declarative form, the teacher makes me be an independent person). In fact, they believed that they couldn't be the independent person in language learning process.

Conclusion

The present study investigated the effects of recast and metalinguistic feedback on the acquisition of place and movement prepositions among Iranian third-grade high school EFL learners' grammar performance. The results of the data analysis showed that both types of feedback (recast & metalinguistic) have the significant effect on learners' performance in the post-test, despite the fact that the effect of metalinguistic feedback was a little bit stronger than the recast. This study indicated some support for using corrective feedback. The results indicated that Iranian third-grade high school learners (at intermediate level) can improve their grammar performance as a result of receiving corrective feedback. These findings emphasized the significance of using corrective feedback in EFL setting where learners can improve their language proficiency. It is worth mentioning that committing error is an inevitable component of language learning, but the number of these errors can be reduced through providing the learners with CF (Ellis, 2007).

Moreover, the present study sheds light on the learners' preference (in the recast group) to be notified through declarative and interrogative recasts. The findings of this study showed there is no significant difference between the participants' preference regarding the two types of recast. Although the participants preferred interrogative form a little bit more than the declarative type, they thought that both could be fruitful for their improvement in grammar. This shows that the participants gave their undivided attention to the different kinds of CF provided by the investigator and used them to make the positive change in their performance. Thus, the results of this study recommended the positive and favorable attitude toward recast and metalinguistic corrective feedback.

References


Golshan, M. (2014). *Corrective Feedback (From Theory to Practice)*. Iran: Tehran, Jungle Press.


