A Comparative Study of the Effect of Recasts and Prompts in Synchronous Computer-Mediated Communication (SCMC) on Students’ Achievement in Grammar

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Abstract: Perceptions of corrective feedback (CF) and different forms of giving these kinds of feedback have been on constant change throughout the history of second language acquisition (SLA). According to [1], grammar instruction can be effectively materialized by giving corrective feedback on learner’s errors while performing some communicative task. The current study was a new endeavor in revisiting the question of comparative effectiveness of two kinds of corrective feedback, recasts and prompts, with targeting new grammatical forms and using the affordances of computer-mediated communication (CMC). Thirty postgraduate students from Iran studying in non-English majors at Universiti Putra Malaysia (UPM) were involved in this study. They were randomly assigned to one of two treatment conditions (corrective feedback in the form of recasts and corrective feedback in the form of prompts) and the control group. During 4 online one-hour text-based chat sessions through Yahoo messenger, participants were given corrective feedback (recasts and prompts) while control group did not receive any kind of feedback. Findings of the study indicated that using both recasts and prompts through computer-mediated communication was effective for learning grammar. Results also showed that groups receiving feedback in the form of prompts outperformed their counterparts in the recast group. Findings of the study bear implications for different lines of research and practice in ESL/EFL.

Key words: Recasts · Prompts · Corrective feedback · Synchronous computer-mediated communication (SCMC)

INTRODUCTION

Past studies and findings of empirical research in second language acquisition (SLA) have led researchers to believe that some kind of focus on linguistic form in the context of meaning-oriented communication can bring positive results to students’ learning [2-7]. [8] defined focus on form as “overtly drawing student’s attention to linguistic elements as they arise incidentally in lessons whose overriding focus is on meaning and communication” (pp. 45-46). Accordingly, [9] have reiterated the importance of drawing learners’ attention to form in meaning-focused activities. The incidental and planned feedback that teachers provide students during communicative language lies in the heart of such focus on form instruction [5, 10, 11]. The focus of this study will be on planned focus on form, as [11] argued, the use of implicit feedback with an intensive focus on preselected form is more likely to be effective than the use of extensive feedback incidentally whereas in the latter, explicit attention to form may be more effective. The latter can demotivate learners by making them to conclude that they do not progress much despite making the effort and therefore it would be pointless to attempt on it further.

Feedback refers to a teacher or another learner’s response to a learner’s utterance containing an error and there have been several classifications of feedback types; it can be implicit as in the case of recasts or explicit as in the case of explicit correction or meta-lingual explanation [13,14]. In another classification, [15] categorizes feedback into recasts and prompts; A recast is the reformulation of a learner’s ungrammatical form by a teacher and is considered an implicit corrective feedback because it is unobtrusive and does not impinge on communication [16]. For example, in response to “The tree has three apple,” a teacher might respond “The tree has three apples”).
Recasts are thought to be capable of drawing learners’ attention to mismatches between their non-target like items and the corresponding target forms [17]. In prompts, teachers try to raise the learners’ awareness of the errors they have made and then push them to self-correct using strategies like repetition, meta-linguistic clues, elicitation and clarification in the context of communicative language teaching.

According to [18], recasts or target like reformulations or exemplars constitute a significant part of language input in L2 classrooms [19], while prompts try to push learners to mention their own target-like output. However, these two CF strategies perform different functions in the classroom; recasts, keeping the learners’ focus on meaning, allow the teacher to maintain control over the linguistic form [20]. It is argued that recasts draw the learners’ attention to L2 forms and make them aware of the mismatches between their interlanguage and L2 forms in the input in the hope that they will rebuild their interlanguage toward the acquisition of target language forms [21-24].

As for prompts, learners are requested to clarify or self-correct their erroneous use of linguistic form in the process of communicative task in the hope that this will provide them with opportunities to notice their errors.

In L2 classrooms, recasts provide learners with correct reformulations and exemplars of the target features and thus constitute part of the input in class. Prompts on the other hand, stimulate learners to make more accurate and target-like output and thus are good opportunities for doing output practices [18].

Despite the growing number of research on the effects of CF strategies in SLA, the results have so far been far from conclusive. Some studies, mostly in the classroom setting, have reported the usefulness of prompts over recasts [13, 25-31]. However, there have been some studies, mostly in laboratory setting, which have not found any significant differences between the two CF strategies [32-34]. Consequently, the question as to the effectiveness of either of the methods remains inconclusive.

Furthermore, in recent years, second language (L2) researchers have found beneficial effects in using technologies like e-mails and chat rooms in a communicative approach to teaching languages [35,36,39-41]. Accordingly, [37] have considered both recast and prompt strategies of pedagogic value to be used in communicative language classrooms. The transience of recasts in face to face interactions may mean that they pass unnoticed. Furthermore, the chances of noticing or incorporating the recast verbally gets slimmer as the teacher gets back to the topic of discussion or the other learners take the subsequent turns [42]. Text-based SCMC is thought as a perfect medium because it is characterized with the interactions that is intransient and with individualized attention which can heighten the effectiveness of CF [22]. In addition, [43] found that most of the feedbacks learners receive in the foreign language is of written nature in contrast to the verbal nature of CF in first (L1) language calls for the immediacy of written recasts in foreign language.

This study is considered unique as it targets new grammatical items other than those which have been the focus of most studies such as simple past tense or third person possessive determiners [13, 26, 32]. According to [37], the degree of familiarity with targeted grammatical items may give the edge for one CF strategy in the cost of the others, in which, recasts will be beneficial for the acquisition of new grammatical items while CF with the use of prompts can be effective when learners already have partial familiarity with the linguistic feature under investigation. To contribute to the body of knowledge and gaps found in the literature on two specific CF techniques- recasts and prompts; the current study seeks to find answers to the following questions:

1. What is the effect of planned CF using recasts in written SCMC (online text-based chat) on students’ achievement in grammar?
2. What is the effect of planned CF using prompts in written SCMC on students’ achievement in grammar?
3. Do both treatments – planned CF with recasts and prompts – affect students’ achievement in grammar differently?

**MATERIALS AND METHODS**

**Sampling and Participants:** Thirty Iranian male postgraduate students from Universiti Putra Malaysia (UPM) participated in the study. They majored in non-English fields of study and were between the ages of 25 to 40. Since all postgraduate students were required to get either a score of at least 550 for the TOEFL Paper-based Test, or Band 6 for IELTS, or 79-80 for the TOEFL Internet-based Test, as a requirement to be able to pursue their studies in UPM, their proficiencies were assumed to be at the upper-intermediate to high level. Research randomizer, a free web-based software, was used to assign the participants to two treatment conditions - 1) planned CF with the use of recasts and prompts and 2) the control group.
Instrumentation: In order to evaluate students’ mastery of targeted grammatical items-coordinating conjunctions, subordinators, relative clauses, noun clauses and noun phrases; 60 multiple-choice questions were designed and randomly divided into pre and immediate posttests. The tests were pilot tested with a group of postgraduate students with similar characteristics to those from the actual study. Students were required to choose from one of three options for each question. Each correct response was awarded a score of one and each incorrect one was awarded a score of zero. The internal consistency value for the tests was 0.79, which is categorized as good. Scores from the tests were calculated and the data was analyzed using paired-samples T-test to answer the first and second research questions, while ANCOVA was used to answer the third research question.

Procedure: A table of random numbers was used to select thirty male students out of the accessible population of Iranian postgraduate students living on campus at Universiti Putra Malaysia (UPM). The researcher subsequently used a free web-based research randomizer to randomly assign them to two experimental groups which include: Group 1 - CF with the use of recasts and Group 2 - CF with the use of prompts and a control group. In other words, there were 10 students for each group in this study. The study included four, one-hour sessions which began with the administration of a pretest in the first session and concluded with the administration of a posttest in the fourth session. The sessions were conducted through written synchronous computer-mediated communication (SCMC), online text-based chats, using Yahoo messenger, free software.

The activities for this experiment were adopted from [44]’s book entitled “Sentence Combining;” followed by four sets of simple sentences which were mostly related to celebrities, professional athletes and in general famous people. Students were asked to discuss through conference chat room or individually and combine those basic sentences into a whole paragraph and project on a large screen or monitor; both experimental groups involved in a series of sentence combining activities. These activities were designed with the aim of drawing students’ attention mostly to the targeted grammatical items including coordinating conjunctions, subordinate and relative clauses and noun clauses and phrases. The reason for selecting these grammatical items was that postgraduate students who have learnt English as their FL usually stumble on academic texts and cannot make a full sense of these texts because they have problems with these grammatical items. According to [1], teachers are recommended to emphasize the grammatical items that are more likely to make some problems to learners out of whole grammar.

The researcher and the students were involved in combining a series of three or four simple sentences into paragraphs with the aim of providing opportunities to the students to receive implicit planned feedback in the form of recasts and prompts on targeted grammatical items. The control group did not receive any focus on form using feedback in the form of recasts and prompts during the process of combining these sentences into paragraphs.

In the recasts condition, the researcher provided the learners with the reformulations of part or whole of the learners’ sentence excluding the erroneous part:

Sample 1:
Original sentences: Charles is the son of mayor. He was arrested last night. He will not be prosecuted.

Alex: Charles, the son of mayor was arrested last night but he will not be prosecuted.

Ben: Charles, the son of mayor, was arrested last night, but he will not be prosecuted.

Alex: Charles, the son of mayor, was arrested last night, but he will not be prosecuted.

In the other experimental group, the instructor provided the corrective feedback on the erroneous use of planned form with the use of prompt:

Sample 1: prompts with the use of elicitation
Original sentences: Michael passed the test. Nobody knew the reasons. He did not study.

Researcher: so please tell the complete one now

Alex: Charles, the son of mayor was arrested last night, but he will not be prosecuted.
Bob: Nobody knew how he passed the test because he did not study.

4:04:04 PM

Jacob: Nobody knew how he had passed the test since he didn't study.

4:04:29 PM

Researcher: Nobody knew how….

4:04:35 PM

Jacob: wait

4:04:48 PM

Jacob: ooh, nobody knew how he passed the test because he did not study.

Sample 2: Prompts with the use of clarification
Original sentences: John has a goal. He wants to pass the test. He studies very much.

Michael: Losing his only child had made Maria a miserable woman.

10:32:34 AM

Researcher: yes right thanks

10:32:43 AM

Researcher: with to please?

10:33:17 AM

Carl: losing her only child had made Maria to become a miserable woman.

10:33:43 AM

Researcher: is it right?

10:33:45 AM

Michael: To lose his only child had made Maria a miserable woman?

10:33:51 AM

Sample 3: prompts with the use of metalinguistics information
Original sentences: Tom Cruise and Katie Holmes got divorced. We don’t know the reasons. They had a strong relationship together.

Benjamin: We don't know the reasons why Tom Cruise and Katie Holmes got divorced because they had a strong relation together.

10:17:49 AM

Researcher: right Benjamin but you repeated something twice, isn’t it guys?

10:17:50 AM

Tom: We don't know why Tom Cruise and Katie Holmes got divorced since they had a strong relationship together.

10:17:59 AM

Robert: I think this is correct

Sample 4: prompts with the use of repetition

2:50:39 PM

Michael: An English language learner does or does not learn English because it depends on his/her motivation to improve.

2:51:34 PM

Researcher: An English language learner does or does not learn???

2:55:48 PM

Michael: Whether or not an English language learner learns depends on his motivation.

2:56:06 PM

Researcher: again right thanks Michael
RESULT

In order to answer the first research question for this study which examined the effect of planned CF using recasts on students’ achievement in grammar through written SCMC, a paired- samples T-test was conducted to evaluate the impact of the intervention on students’ scores on grammar test. As shown in Table 1, there was a statistically significant improvement in the grammar test scores from pretest to posttest (t (9) = -2.331, p ≤ .045).

In order to answer the second question for this study which examined the effect of planned CF using prompts on students’ achievement in grammar through written SCMC, the same paired samples T-test was used again. Based on the results shown in Table 1, there was a statistically significant improvement in the grammar test scores from pretest to posttest (t (9) = -32.250, p = .000) for the prompts group.

Table 1 also presents results for the control group in which the results indicate that there was no statistically significant difference from the pretest to post test scores obtained (t (9) = 1.342, p = .213).

In order to answer the third question in this study, which examined whether both treatments- CF with the use of recasts and prompts- affected students’ achievement in grammar differently, a one-way between- groups analysis of covariance (ANCOVA) was conducted to compare the effectiveness of two different interventions designed to improve students’ achievement in targeted grammatical items.

The independent variable was the type of CF (CF with the use of recasts and CF with the use of prompts) and the dependent variable consisted of scores on the grammar test administered after the intervention was completed. Participants’ scores on the pre-intervention administration of the grammar test were used as the covariate in this analysis.

Results of preliminary analysis that has been excluded from this study for the sake of brevity indicated that assumptions of normality, linearity, homogeneity of variances, homogeneity of regression slopes and reliable measurement of the covariate are met and there was no violation of them. Table 2 shows that there was significant difference between all three groups involved in this study.

Table 1: Descriptive statistics and the results of Paired Samples T- Test for all groups

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prompt (Pretest) - Prompt (Posttest)</td>
<td>-8.600</td>
<td>.843</td>
<td>.267</td>
<td>Lower -9.203, Upper -7.997, t (9) = -32.250, p = .000</td>
</tr>
<tr>
<td>Recast (Pretest) - Recast (Posttest)</td>
<td>-1.600</td>
<td>2.171</td>
<td>.686</td>
<td>Lower -3.153, Upper -0.047, t (9) = -2.331, p = .045</td>
</tr>
<tr>
<td>Control (Pretest) - Control (Posttest)</td>
<td>.500</td>
<td>1.179</td>
<td>.373</td>
<td>Lower -.343, Upper 1.343, t (9) = 1.342, p = .213</td>
</tr>
</tbody>
</table>

Table 2: Results of one-way between- groups analysis of covariance (ANCOVA)

<table>
<thead>
<tr>
<th>Tests of Between-Subjects Effects</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power b</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>3</td>
<td>197.434</td>
<td>89.958</td>
<td>.000</td>
<td>.912</td>
<td>269.874</td>
<td>1.000</td>
</tr>
<tr>
<td>T1</td>
<td>1</td>
<td>42.096</td>
<td>19.180</td>
<td>.000</td>
<td>.425</td>
<td>19.180</td>
<td>.988</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>225.714</td>
<td>102.843</td>
<td>.000</td>
<td>.888</td>
<td>205.686</td>
<td>1.000</td>
</tr>
<tr>
<td>Error</td>
<td>26</td>
<td>2.195</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>5903.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Corrected Total</td>
<td>29</td>
<td>649.367</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. R Squared = .912 (Adjusted R Squared = .902)
b. Computed using alpha = .05
Table 3:

Pairwise Comparisons

Dependent Variable: Posttest

<table>
<thead>
<tr>
<th>(I) Group</th>
<th>(J) Group</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval for Difference*</th>
</tr>
</thead>
<tbody>
<tr>
<td>dimension1</td>
<td>dimension2</td>
<td>7.057*</td>
<td>.664</td>
<td>.000</td>
<td>5.359 - 8.756</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>9.043*</td>
<td>.664</td>
<td>.000</td>
<td>7.344 - 10.741</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>-7.057*</td>
<td>.664</td>
<td>.000</td>
<td>-8.756 - 5.359</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>-9.043*</td>
<td>.664</td>
<td>.000</td>
<td>-10.741 - 7.344</td>
</tr>
<tr>
<td>2</td>
<td>dimension2</td>
<td>1.985*</td>
<td>.668</td>
<td>.019</td>
<td>.277 - 3.694</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>-1.985*</td>
<td>.668</td>
<td>.019</td>
<td>-3.694 - 2.277</td>
</tr>
</tbody>
</table>

Based on estimated marginal means

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

a. Adjustment for multiple comparisons: Bonferroni.

<table>
<thead>
<tr>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
<th>Partial Eta Squared</th>
<th>Noncent. Parameter</th>
<th>Observed Power</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contrast</td>
<td>451.427</td>
<td>2</td>
<td>225.714</td>
<td>102.843</td>
<td>.000</td>
<td>.888</td>
<td>205.686</td>
</tr>
<tr>
<td>Error</td>
<td>57.063</td>
<td>26</td>
<td>2.195</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F tests the effect of Group. This test is based on the linearly independent pair wise comparisons among the estimated marginal means.

a. Computed using alpha = .05

adjusting for the pre-intervention scores, F (2, 26) = 102.843, p = .000, partial eta squared = .888. There was also a strong relationship between the pre-intervention and post-intervention scores on the grammar test, as indicated by a partial eta squared value of .727.

According to the Table 3, pairwise comparison of different levels shows that the prompts group outperformed the recasts group.

DISCUSSION

This paper examined the comparative effect of providing two types of planned feedbacks- recasts and prompts- in written SCMC on students’ achievement in grammar. To this end, three research questions were examined: 1) what is the effect of planned CF using recasts in written SCMC on students’ achievement in grammar? 2) What is the effect of planned CF using prompts in written SCMC on students’ achievement in grammar? 3) Do both treatments – planned CF with recasts and prompts - affect students’ achievement in grammar differently?

In order to answer the first question for this study, a pair-samples T-test was used. The results indicated that there was a significant difference between pre-test and immediate post-test among that group whose members received planned focus on form using recasts feedback. Accordingly, [17, 21, 22] indicated that recasts draw learners’ attention to L2 forms in input and makes them capable of detecting the mismatches between their interlanguage and input that finally results in the acquisition of target forms. In other words, recasts are able to draw learner’s attention to mismatch between their non-target like items and target forms.

The second research question was answered using the same paired-samples T-test again; the result indicated that there was a significant improvement in the test scores of the students between pre and posttests for the group whose members received CF with the use of prompts.

In order to answer the third question for this study, an ANCOVA was used in which the results indicated that participants, who received planned focus on form using prompts feedback, outperformed those students who received planned focus on form in terms of recasts feedback and control group in the posttest. Findings of this study are congruent with the findings of [25] in that recasts are least effective in facilitating the uptake of L2 forms. Furthermore, many studies support the argument that classroom learners who are prompted are more likely to process these forms in the next encounters than learners by recasts of these forms [1, 26, 27, 31].
According to [46], the effectiveness of prompts unlike recasts has been associated with modified output. From the theoretical perspective, [46] demonstrated the effectiveness of prompts with skill acquisition theory as well as the negative evidence they provide. Skill acquisition theory gives a description of changes in skills or similarly in knowledge from declarative to procedural.

However, caution should be exerted in the interpretation of these findings as [26] in their study concluded that the efficacy of recasts and other CF techniques depends on so many factors including proficiency level, age group, grammatical feature and teaching or learning context.

CONCLUSION

In light of the findings of this study, syllabus designers and grammar textbook writers can introduce grammatical rules in their books through a focus on form approach by considering both fluency and accuracy. Taking the results of the studies like this into consideration, teachers can make correct decisions about types of approach (forms versus form), classroom error correction strategy (recasts, prompts and explicit feedback) and types of grammatical items in the process of L2 learning. According to [22] teachers’ awareness of the learning process rather than their students’ response to correction is a crucial determining factor for CF. Upon deciding on the type of feedback for learning problems, it is of utmost importance that the teacher has the knowledge of teaching strategies so that he or she can choose the one that matches the targeted problem and ongoing dynamics of communicative activities (p.25). Accordingly, teachers should provide opportunity to the students to master form in communication, authentic or simulation tasks and real life situation. Even though the research evidence supports the beneficial effect of using prompts as CF strategy, more research with different participants, in different settings, using different treatments, using different feedback strategy and using different linguistic features like pronunciation, vocabulary, notion, function as a focus of the study is needed before we can arrive to any conclusion about whether certain CF techniques are more effective than others.

REFERENCES


