THE EFFECT OF MALL-BASED TASKS ON EFL LEARNERS' GRAMMAR LEARNING

by Farzaneh Khodabandeh, Jalal ed-din Alian and Hassan Soleimani

Department of Linguistics and Language Teaching, Payame Noor University
PO box 19395-3697 Tehran, Iran

farzaneh.khodabandeh @ gmail.com, jalal.alian @ gmail.com, arshia.soleimani @ gmail.com

Abstract
Many studies have confirmed the importance of tasks on language learning. Nowadays, many teachers apply different kinds of tasks in their classrooms. The current study investigated the effect of mobile assisted language learning tasks (MALL) on participants’ English grammar learning. The researcher administered a pre-validated grammar test to 90 junior high school participants aged between 14 to 16 with the mean age 15. The researcher taught grammar to both groups inductively and asked the participants to do their assignments according to their group’s tasks. Based on the post-test results, it can be concluded that the experimental groups had better results than the control group. The study supports the hypothesis that sharing tasks in virtual networks can have positive results for language learning, specifically grammar learning.

Keywords: grammar learning; Mobile Assisted Language Learning (MALL); photocopied questions; social networks; tasks

1. Introduction
In the past twenty years in Foreign Language (FL) learning, there have been many studies about the effects of tasks on language learning. Task refers to a “work plan that requires learners to process language pragmatically in order to achieve an outcome that can be evaluated in terms of whether the correct or appropriate propositional content has been conveyed” (Ellis, 2003, p. 16). Nowadays, most language teachers use tasks in their classes to teach English. Task-based instruction refers to the activities such as solving problems or completing projects in order to get learners involved in meaningful and goal-oriented communication (Syyedi, 2012).

There are many studies that have confirmed the importance of tasks on language skills (e.g. Beglar & Hunt, 2002; Kim, 2009; Robinson, 2007; Salimi & Dadashpour, 2010). There is a clear relationship between all language learning skills (speaking, listening, reading, &
writing) and as Linse (2005) states, progress in one skill can be a precondition and prerequisite towards progress in other skills.

Many researchers have confirmed that learners learn foreign language skills better if teaching focuses explicitly on grammatical or lexical forms (Norris & Ortega, 2006). Based on recent studies, grammar instruction helps learners to reach the high level of proficiency in accuracy and fluency (Ellis & Celce-Murcia, 2002, as cited in Ellis, 2003). Unfortunately, uninteresting lessons about grammar have had a discouraging effect on its learning among learners in the last decades (Wang, 2010). When the content in a coursebook is presented in a boring way, it becomes very difficult to stimulate the interest of learners (Ruso, 2007).

As such, lack of sufficient research into the effects of tasks on grammar learning creates a need to study the effects of some motivating tasks on grammar learning. These situations can be seen as an opportunity for a new study that focuses on combining interesting tasks and grammar learning.

Nowadays participants in some institutions learn English through smart phones. Trifanova, Knapp, Ronchetti, and Gamper (2004) define mobile devices as “any device that is small, autonomous, and unobtrusive enough to accompany use at every moment” (p. 3). Prensky (2005) states that a mobile phone is one of the instruments which can be used by students to learn in technology era. Zhao (2005) indicates that smart phones prepare the best situation for foreign language learning. In addition, mobiles can be used in numerous forms such as face-to-face or distant modes. Unfortunately, research into the effect of mobile assisted language learning-based tasks (MALL) on grammar learning is still rather rare. To fill this gap, the current study investigates the effect of MALL-based tasks on EFL participants' grammar.

2. Literature review on MALL

There have been a lot of studies about the effects of task-based teaching approach on learning a foreign language. For example, O’Brien (1996) proved the positive effects of using tasks to improve participants’ oral proficiency, while Bygate (1999) indicated the efficacy of communicative tasks on participants’ grammatical competence. Similarly, McDonough and Mackey (2000) reported the effectiveness of using tasks in enhancing participants’ focus on language communication. In another study, Shehadeh (2001) indicated that using tasks helps learners to practise initiation of a communication activity. Mann (2006) and Torky (2006) reported that applying tasks was remarkably beneficial in developing oral performance of learners. At the same time, Karimi (2010) stated that using tasks effectively expanded the
participants’ knowledge of words, while Korkgöz (2011) found that the participants had positive attitudes towards tasks when combined with technology. Hasan (2014) maintained that task-based classrooms provided the opportunity for the learners to speak without hesitation. According to Choo and Too (2012), the use of task-based teaching motivates learners toward language learning. Beglar and Hunt (2002) revealed that working collaboratively on tasks motivate learners. Rogers and Medley (1988) showed that the grammar of learners proved to develop through exposure to tasks. Fotos and Ellis (1991) revealed that teaching grammar communicatively through tasks helped participants improve their understanding of difficult grammatical forms.

There are quite a few studies about the effect of mobile phones on language learning. For instance, Thornton and Houser (2005) examined the use of mobile devices by Japanese university participants in a language learning context and the results confirmed the positive effect of mobile devices. Basoglu (2010) compared traditional flash cards on paper with digital flash cards and mobile phones. His findings confirmed that the participants who had used the mobile application obtained better results. In another study by Sole, Calic, and Neijmann (2010), participants who reported working through mobile phones showed a better engagement in learning. Baleghzadeh and Oladrostam (2011) investigated the effect of MALL on grammatical accuracy of EFL participants. The results showed that the participants in the experimental group displayed better performance than the participants who were in the control group. Begum (2011) made an attempt to investigate the possibility of using cell phone in the EFL classroom of Bangladesh as an instructional tool. After analyzing the data, it was revealed that despite some challenges, cell phone has great potential as an instructional tool. In 2011, Motallebzadeh, Beh-Afarin, and Daliry Rad proved that SMS has a positive influence on the retention of collocations among Iranian lower intermediate EFL learners and that participants have a positive attitude toward learning collocations through SMS.

3. Study

3.1. Aim of the research

All of the studies summarized above considered MALL as a method of learning, not a task. In addition, little is said about the effect of MALL tasks on EFL learners’ grammar learning. In the current study, the researcher investigates a mixture of MALL and tasks to see its effects on EFL learners’ grammar learning to verify the following hypotheses:

1. MALL-based tasks have no effects on EFL learners’ grammar learning.
2. There are no differences between the MALL group and the control group.

3.2. Participants
In the current project, 60 Iranian junior high school participants from Qom province, Iran were selected out of 160 students. The homogeneity of the participants was checked before starting the data collection procedures. In so doing, they were pre-tested through a test which contained 30 multiple-choice items related to structure and written expression and 10 items related to reading comprehension. The selected participants were those with intermediate level of language proficiency. The mean and the standard deviation of the participants’ test scores (M=34.18, SD=2.20) were used as the criterion for their selection. Based on the pre-test results, 60 participants whose mean scores in grammar knowledge were one standard deviation above and below the mean were chosen. All the participants were male and native speakers of Persian. The researcher briefed the participants about the mechanism of the research and randomly divided them into two groups of 30 participants.

3.3. Design and procedure
The effect of MALL tasks versus traditional ones on Iranian junior high school students was investigated through a quasi-experimental design. The participants were randomly selected and assigned to the control and experimental groups. The researcher conducted a pre-test and at the end of the research, a post-test was administered.

In the current study the researcher used the following instruments:

1. **Tests.** The researcher used three tests, one for homogenising the participants, one pre-test and one post-test.

2. **Smart phones.** In the MALL-based task group, the participants did their assignments in their sub-groups with the use of applications of their smart phones such as Movie Maker and Google Photos and shared them on a defined telegram group.

3. **Marker and whiteboard.** To teach grammar inductively, the researcher used marker and whiteboard. The researcher wrote the examples on the whiteboard and the participants had to discover the rules.

The current study was conducted over 12 sessions which was enough time for teaching the grammatical rules of the course (Present Simple tense, Present Continuous tense, possessive 's and of, possessive adjectives, adverbs of frequency).
The researcher first homogenised the subjects. 60 participants were chosen according to their mean scores on the test. They were randomly divided into two groups in two different classrooms. In each group, there were 30 participants. In both groups, the researcher divided the participants into six sub-groups. There were five participants in each sub-group. Then the pre-test was administered to both the control and the experimental groups before the treatment. The researcher taught grammar inductively to both groups. The difference between the groups was their tasks. As an assignment of the control group, the researcher asked them to do their workbooks and for their tasks, the researcher gave them photocopied questions which were related to the grammar lessons.

The researcher taught grammar rules inductively to both groups as follows:

1) The researcher presented the participants with a variety of examples for a given concept without giving any explanations about how the rule is used and formed.

2) The participants drilled and practised the examples. For instance, the learners applied their speculations to find out the grammatical rule.

3) As a conclusion to the activity, the researcher asked the participants to make new sentences and find out the rule of the examples and explain the grammatical rule.

4) As an assignment, the participants of both groups had to do their course work book.

Beside that, the researcher gave the participants some assignments according to their groups. The control group’s participants had to do the photocopied exercises given by the teacher. They included doing multiple-choice questions, unscrambling sentences, filling the blanks and finding errors. The participants had to answer those written questions. In the following session, each of the participants had to come to the front of the class and answer the photocopied questions on the whiteboard.

On the other hand, like the control group, the experimental group comprised 30 participants and 6 sub-groups. The researcher administered the Telegram instant messaging system to the participants of the experimental group. On the first day of the experiment, the researcher created a Telegram and asked the participants to join the group. The teacher did not give them the photocopied questions, they had to find extra materials which were related to the grammar rules of their lesson and share them on the Telegram group. For example, one sub-group made some pictures that illustrated the specified rule and shared it on the Telegram group. For 12 weeks, the participants performed the grammar tasks and shared them on the group.
During the last session the researcher took a pre-validated post-test to find out the effects of the tasks on participants’ grammar knowledge. The post-test consisted of 40 multiple-choice items, with each item accounting for 0.5 points. There was no negative score; therefore, the maximum score was 20.

To assess validity and reliability of the current study, both tests (pre-test and post-test) were given to a jury of three English language instructors to elicit their views about the accuracy, clarity, and appropriateness of the instruments. Then, the researcher reviewed and modified the tests according to their recommendations. The usability of the tests was tested through a pilot study of 30 participants that the researcher had excluded from the sample. In the current study, the researcher used Cronbach’s alpha to calculate the reliability of the study.

3.4. Results and findings

One of the null hypotheses of this study was that MALL-based tasks did not have any effect on EFL learners’ grammar learning. In order to analyse the data to test the null hypothesis, first the descriptive statistics of the pre-test were computed. Afterwards, the independent samples t-test was used to compare the scores between the control and experimental groups.

Descriptive statistics of the pre-test indicate the mean of the control (7.87) and the experimental group (7.97). In addition, the distribution of the data was normal for each group, because the degree of skewness and kurtosis were between -2 and +2 (Appendix 1, Table 1).

Next, the researcher used the independent samples t-test on the pre-test results to find out the degree of significance difference between the control and the experimental groups (to test the second null hypothesis). The t-test results revealed that there was no significant difference in grammar knowledge between the control and experimental groups on the pre-tests (t = .464, P = .644, P > α) in which the P value was more than .05, and the t-observed .644 was less than the t-critical, 2.04. Therefore, it can be concluded that the two groups were homogenous at the pre-test (Appendix 1, Table 2).

Before calculating the statistics of the post-test results, it was necessary to investigate the reliability and validity of the post-tests. The researcher used Cronbach’s alpha to obtain the reliability calculation. Cronbach’s alpha was 0.81, therefore, the test can be assessed as reliable (Appendix 1, Table 3). Next, the researcher calculated the descriptive statistics of the post-test results. The means of the experimental and control groups were 18.43 and 10.48 respectively (Appendix 1, Table 4).
The researcher used Shapiro-Wilk test to investigate the normality of the distribution in two groups based on the post-test results. The Normality Test revealed P values of .208 and .152 for the grammar post-test in the control and the experimental groups respectively. P values for both groups were more than selected significance, i.e. .05 for this study ($P > \alpha$); consequently, it can be claimed that two sets of scores are normally distributed (Appendix 1, Table 5). Thus, the parametric independent samples t-test was applied to compare the results of two groups based on the post-tests. The test detected significant difference in grammar learning between the two groups on the post-test ($t = 33.462$, $P = .000$, $P < \alpha$); consequently, the null hypothesis of this study was rejected (Appendix 1, Table 6).

4. Discussion

Based on the research findings, it is disclosed that the MALL-based-task group achieved better results than the control group. The findings of this research are in line with Thornton and Houser (2006), Sole et al. (2010), Mitchell et al. (2010), Bryson and Cai (2004), as well as Baleghzadeh and Oladrostam (2012), who indicated a positive relationship between using mobile devices and language learning. In addition, based on the researchers’ observations, it can be concluded that the participants who took part in the mobile-based task group had a higher motivation to learn grammar than the control group. The findings of this study also showed that the motivated participants also performed better in the post-test. The present study is in line with Lochana and Deb’s (2006) research, who suggested that task-based instruction helps learners not only in terms of proficiency development but also in terms of motivation. Richards and Rodgers (2001) also reported that learners’ success in achieving the goals of tasks increases their motivation.

In addition, it was proven that using mobile phones helps learners have better interaction and better engagement with their peers. Findings of this study are in congruence with Zhao (2005), who declares that smart phones create the best situation for learning that can hardly be found. The study results also corroborate those of Lopez (2004), who indicated that the learners who perform tasks which are related to their language course learn English
more effectively and collaboratively. The findings of his study confirmed the principle of the sociocultural perspective that stated social interaction facilitates learning through the process of scaffolding.

In the control group, the participants’ task was to answer the written questions prepared by the teacher. The results showed that the participants in the control group obtained lower scores. It is consistent with Wang’s (2010) belief that lessons about grammar that are not interesting and motivating have a discouraging effect on learners’ attitude towards grammar teaching and learning. As the results of the control group showed, using photocopied questions as the teacher did can have a negative effect on participants’ language learning and motivation. Similarly to Ruso (2007), it can be stated that when the content of a coursebook is presented in a boring way it is not easy to stimulate the interest of the participants.

5. Pedagogical implications and final conclusions

The analysis of data indicated that the experimental group’s participants were highly satisfied with sharing their tasks in the Telegram group. The findings revealed that the Telegram social network in this study was helpful in triggering students’ learning and motivation. It encouraged the participants to present various tasks through it which increased their practice opportunities. According to the results of the present study, it can be concluded that students welcomed the idea of using tasks through social networks while learning English as a second language. In short, the findings of the control group revealed that the teacher’s photocopied questions were not helpful as the social networks. The results clearly proved that the experimental group participants had greater interaction within the Telegram group which affected their learning positively.

Further research can investigate the effects of the participants’ motivation in social networks on learning English. Furthermore, it would be worth comparing the participants’ interaction within the social networks and classrooms. Besides, virtual discourse can be compared and contrasted with a traditional classroom.

The findings of this study have pedagogical implications for teachers and participants. Teachers should carefully select the materials of a coursebook and provide learners with interesting materials that trigger their interest. According to Allwright and Bailey (1991), learners can switch off because they do not like the way the content of their course is presented in the book. The results showed that the experimental groups outperformed the control group since the use of tasks on Telegram raised the motivation of the participants. It is
recommended that language teachers become familiar with Telegram, which is a very popular social network, and adopt it in language teaching. The experimental group’s participants were quite receptive to using tasks in Telegram group. Teachers can ask their participants to use Telegram and ask them to provide a variety of enjoyable tasks. As Ruso (2007) states, serious consideration should be given to using enjoyable tasks in classes and language teachers should provide their participants with opportunities to make use of content learnt through tasks. Using social networks as a framework to execute tasks not only improves the participants’ language skills but also expands their social knowledge of the world. Besides, this is how teachers can incorporate new methods and techniques in their skillset (Wallace, 1991).

References


Appendix 1.

Table 1. Descriptive statistics of the pre-test

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std Deviation</th>
<th>Variance</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>Statistic</th>
<th>Std Error</th>
<th>Statistic</th>
<th>Std Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>30</td>
<td>7</td>
<td>9</td>
<td>7.87</td>
<td>.776</td>
<td>.602</td>
<td>.242</td>
<td>-1.261</td>
<td>.208</td>
<td>.427</td>
<td>-1.780</td>
<td>.833</td>
</tr>
<tr>
<td>Experimental</td>
<td>30</td>
<td>7</td>
<td>9</td>
<td>7.97</td>
<td>.890</td>
<td>.792</td>
<td>.068</td>
<td>-1.780</td>
<td>.208</td>
<td>.427</td>
<td>-1.261</td>
<td>.833</td>
</tr>
</tbody>
</table>

Table 2. Reliability statistics of the post-test

<table>
<thead>
<tr>
<th></th>
<th>N of Items</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>40</td>
<td>.813</td>
</tr>
</tbody>
</table>

Table 3. Independent sample t-test between the control and experimental groups on the pre-test

<table>
<thead>
<tr>
<th></th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Score</td>
<td>Equal variances assumed F = 0.208 Sig. = .060</td>
<td>54.335</td>
</tr>
<tr>
<td></td>
<td>Equal variances not assumed F = 54.335 Sig. = 77.830</td>
<td>77.830</td>
</tr>
</tbody>
</table>

Table 4. Descriptive statistics of the post-test

<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>Experimental group</td>
<td>30</td>
<td>17</td>
<td>20</td>
<td>18.43</td>
<td>.848</td>
</tr>
<tr>
<td>control group</td>
<td>30</td>
<td>9</td>
<td>12</td>
<td>10.48</td>
<td>.987</td>
</tr>
</tbody>
</table>

Table 5. Shapiro-Wilk Test of Normality for two groups based on post-test results

<table>
<thead>
<tr>
<th></th>
<th>Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental group</td>
<td>.953</td>
<td>30</td>
<td>.208</td>
</tr>
<tr>
<td>control group</td>
<td>.948</td>
<td>30</td>
<td>.152</td>
</tr>
</tbody>
</table>
Table 6. Independent sample test to compare the post-test results in control and experimental groups

<table>
<thead>
<tr>
<th>Score</th>
<th>Levene's Test for Equality of Variances</th>
<th>t-test for Equality of Means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>F</td>
<td>Sig.</td>
</tr>
<tr>
<td>Equal variances assumed</td>
<td>.292</td>
<td>33.462</td>
</tr>
</tbody>
</table>