Enhancing the Accuracy of the Use of Verb Tenses by Iranian Intermediate EFL Students through MALL: The Case of English Grammar Ultimate Software App

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Abstract

Teaching grammar to EFL students has always been a challenge for EFL teachers. Many studies have acknowledged the role of using mobile apps to remove this problem. Therefore, the present study was conducted to see if the use of English Grammar Ultimate Software app can enhance the use of verb tenses by Iranian intermediate students. To this end, thirty-two students participated in this study based on their performance in a Quick Oxford Placement Test. They were randomly assigned to experimental and control groups. Each group consisted of 16 learners. Then a test of grammar was administered to two groups as the pre-test to assess their knowledge of simple present, simple past, present continuous, past continuous, and simple future tenses and ensure their homogeneity. Learners in the control group were taught these tenses through traditional language classrooms and received no extra treatment at all. However, learners in the experimental group were taught those tenses through English Grammar Ultimate Software app. Finally, in order to measure the effect of the treatment, a posttest was given to both groups. The results of the comparison between and within groups showed that the participants who had benefited from mobile-assisted learning had a significantly better performance on the post-test than the participants in the control group. The findings of the present study can have implications for material developers and EFL language teachers teaching grammar.

Keywords: E-Learning, Grammar knowledge, MALL, Material development

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Introduction

Not so long ago, mobile technologies had limited connection with education and its requirements. Absence of technology from the educational environment was a common phenomenon that even in such a developed country like England, there was no necessity for it (Facer, 2004). However, within a few years, in the wake of the prevalence of technologies, everyone carries a self-phone in his/her pocket or purse. Mobile is no more a single portable device for sending and receiving calls; it could act as a radio, cassette, DVD player, and even as a tiny computer by performing some applications. Due to the accessibility of mobile services, mobile Learning (m-learning) has become a predominant form of E-learning. Different scholars have various viewpoints about m-learning, and it has emerged as a controversial subject matter. For instance, according to Alexander (2004), m-learning can be carried out anywhere without any obstacle. On the other hand, Beaty (2003) is skeptical about technology and believes that it is a waste of time and money.

Capability of mobile in language learning was explained as a great vehicle for language learning, Tan and Yaowa (2012) call it Mobile Assisted Language Learning (MALL) or m-learning that means the use of portable devices in any time and any place (Geddes, 2004). While there would be some other devices, but cell-phones can be considered the best one as it is becoming an inseparable part of us. The huge revolution of technology could impact other aspects of ahumans' life, especially education and learning and lead to an easy way of education called E-learning. As Pourhosein GilakJani (2016) states, many teachers do not pay too much attention to grammar. They teach speaking and vocabulary in an excellent way, and most of them make learners powerful just in reading and listening. Teachers in many institutes and schools of Iran still use traditional ways of teaching grammar. This problem is perhaps due to their lack of knowledge or experience in using modern technologies and softwares, especially, e-learning softwares. In addition, students are allowed to use their tablets or mobiles in the classroom, and they can learn with their teachers synchronously. Due to the inefficiency of traditional teaching, students and learners are not able to remove their fossilized grammar mistakes; therefore, the current study aims to use English Grammar Ultimate Software app to teach some verb tenses and check its impact on enhancing the use of verb tenses of students. To this end, the following research question was formulated:

RQ1: To what extent can the use of English Grammar Ultimate Software enhance the accuracy of the use of the tense of EFL learners?

Literature Review

Nowadays, people are more connected to the digital world such as computers and the internet. However, the digital world is more exciting for young people. Therefore, students prefer spending more time in this world, so this provides a good opportunity for teachers to encourage students. Various softwares and websites are available to play an encouraging role in the learning process. Hence, the digital world has been turned to an attractive ground for teaching and learning especially language teaching and learning. Aweiss (1994) investigated the effect of computer-mediated reading supports on comprehension during independent reading. The findings indicated that those having access to computer-assisted reading aids scored more on the direct recall protocol than those with no contact to any reading aid. Some of the studies in literature have addressed the grammar learning of participants. In this relation, Han's (2017) study was on the effect of using a mobile application on EFL learner's belief about language learning and showed that students' attitudes toward the use of applications in classroom were positive. Basal, Sari, Tanrierdi and Yilmaz, (2016) investigated the effect of mobile application on teaching idioms and showed that the app was an effective tool for teaching idioms. In addition, Nesbitt and Muller, (2016) explored the perception of learner's about the use of apps. Oz and Yurdagul (2018) investigated the EFL learners' perceptions toward smart phones in higher education in the context of foreign language learning .The findings of their study showed that the students can easily have access to information about language skills by smart phones.

Hee Jin(2015) studied the use of smart phones for learning in an EFL student grammar course and investigated the effect of using smart phone application Band in blended learning for improving Korean EFL learners English grammar skills .His findings showed that smart phone application Band in blended learning was very effective in learning grammar ,and students have positive attitude about using it ,and believed that it increased the students' involvement in learning grammar. Another study was done by Cannonier, Crook, and Simmons (2018) who tested a model of impact of a homework reminder mobile application (APP) on language functions ,and their findings suggested that Homework Student Planner app predict learners' executive functioning by developing regiment and managing the time when

executive functioning increased .Rachels and Rockinson, (2018) examined the effect of mobile ramification application on the third and fourth student's Spanish language by using Duolingo during12 weeks. Students were given 50 multiple choice English to Spanish and Spanish to English questions pretest including vocabulary and grammar .An analysis of the data showed no sigificant difference between students who used Duolingo and students who used traditional instruction but Dualingo was a very useful tool for teaching Spanish to English students

Mobile phones act as a learning device despite their technical limitation and tend to propose activities which are formally-designed and carefully crafted by educators. Technology which is used in these devices are not yet widely accessible or well understood. Personal need and usage circumstances including greater mobility and travel provide the essence of the use of mobile devices by a vast majority of people (Kukulska-Hulme, Traxlerand Pettit, 2007; Pettit & Kukulska-Hulme, 2007). Definition of mobile learning has changed throughout the history.In the past it was defined as the use of mobile technology, but currently it means the mobility of the learner (Sharples, 2006), actually learning through e-learning allows the learners to learn out of classroom environment when students are at their home in front of their own computers online or offline, by this way informal aspect of m-learning is emphasized (Fallakhair et al 2007).

There are two characteristics for mobile phones: one of them is portability and the other is connectivity. Any portable learning material like books, audio-cassettes, audio-CDs, and portable radios and DVD players, can be used for mobile assisted learning. As for connectivity, designing the mobile system must have the capability of being connected to the learning website using the wireless network of the device. Trifanova et al. (2004) describe mobile devices as "...any device that is unobtrusive, small, autonomous and enough to attend us anytime". Naturally, m-learning is recognized both by being accessible "anytime anywhere," (Geddes 2004).

Methodology

Participants

The participants of the study comprised of 200 male and female students studying English as a foreign language in Safir and Sobhan language institutes in Mobarake. Their age ranged from 19 to 22. An Oxford Placement Test was used to ensure the homogeneity of participants.

Among all 200 participants there were only 57 learners with intermediate level. After that 32 participants were selected randomly from among those 57 homogenized learners. These 32 participants were randomly assigned into two groups with 16 participants for control group and 16 participants for the experimental group. This study was done in the academic year 2018/2019. Most of the students had studied English for an average period of 1 year mainly in private language institutes in Mubarakeh .

Instruments

Three main instruments were utilized to investigate the effect of English Grammar Ultimate Software on improving the use of verb tense of Iranian EFL students.

The Oxford Placement Test

The test helped the researcher to make sure if all of the subjects were in intermediate level of proficiency. It was the test of language proficiency which was presented by Oxford university press local examination syndicate and provided tutors with a reliable and time saving technique for determining the proficiency level of a learner. This test was given to the participants to measure their proficiency. The mentioned test consists of two sections including chapter one (from 1 to 40 question) and chapter two (from 41 to 60). These two chapters were designed to assess learners' proficiency level by 60 multiple choice tests of grammar, vocabulary and reading. Based on the results of OPT, 32 students whose score fell between one standard deviation above and below the mean were selected as the main participants of the study.

Grammar Test as the Pretest

To measure the grammar knowledge of the learners before the instruction, the learners were given a 20-item multiple choice grammar test and the time allocated to this test was 30 minutes. The total score was 20, each item worth one point. The content validity of the test was confirmed by two experts. It means that they confirmed that the test is suitable for the proficiency of the learners and can elicit the required data. The reliability and the validity of the test were assessed by three proficient teachers.

Grammar Test as the Post test

To measure the grammar knowledge of the learners before the instruction, the learners were asked to answer a 20-item multiple choice grammar test and the time allocated to this test was 30 minutes. The total score was 20, each item worth one point. The content validity of the test was confirmed by two experts. It means that they confirmed that the test is suitable for the level of the learners and can elicit the required data. The reliability and the validity of the test were assessed by three proficient teachers.

English Grammar Ultimate Software app

This android application (English Grammar Ultimate Software) helps to improve English grammar. English Grammar Ultimate is a free software application from Teaching and Training Tools subcategory part of Education category. The app is currently available in English and it was last updated in 2019.The program can be installed on Android.

English Grammar Ultimate Software has four parts: 1) English Grammar2) English Tenses 3) Spoken English 4) Grammar Practice.

1) English Grammar part is about Gender, homonyms, idioms, and irregular verbs.
2) English Tense has 12 basic tenses like: present tense, present continuous tense, present perfect tense, present perfect continuous tense, past tense, past continuous tense, past perfect tense, past perfect continuous tense, future tense, future continuous tense, future perfect tense, future perfect continuous tense. In each lesson it explains two aspects of the tense:
Structure: How to make tense.
Use: when and why to use the tense
3) Spoken English is about introducing yourself and others, greeting, and permissions.
4) Grammar Practice comprises of 10 quizzes about preposition of place and time, articles, and personal pronouns.
One of the Advantages of this app over other apps is that it has 10 quizzes for every tense in the Grammar Practice part, and when the option is selected, the correct or incorrect option is marked with green and red color and finally it shows the percentage of correct answers and those who score under 50% are able to try again. Another benefit of this app is that everybody can use this app offline. Another advantage is that

this app is only run in English and does not have any Persian translation . Similar apps usually have 1 or2 parts and are just about tenses , but this app has four parts about tenses, speaking, writing and quizzes and covers all of the following grammar subjects:Tenses ,Question Tags ,Reported Speech ,Trial Questions ,Use of Let ,Use Of Little, A Little, Few, A Few ,Use of Shall ,Use of Should ,Use of Wish, Used to ,Using of Must or Have To ,Verbs ,Phrases ,Plurals ,Practice1 ,Prepositions ,Pronouns ,Punctuation Marks ,Quantifiers , Active Or Passive Voice , Adjectives , Adverbs , Articles , Auxiliary Verbs , Capitalization , Grammar Mistakes , Conditionals , Conjunctions , Degree of comparison , Determiners , Direct and indirect speech , English phonetics , Essay Writing , Figure of speech , Gender , Gerund and present participles , Going to , Had better , Homonyms , Idioms , Independent and Dependent Clauses , Infinitives , Interjections , Irregular verbs , Nouns.

Procedures

This research was administrated in 2018/2019 academic year. The tenses which were the focus of the study were simple present, simple past, present continuous, past continuous, and simple future. In order to conduct the study, the following steps were taken: The first step in this study was to homogenize the learners into intermediate level. Accordingly, the whole population (200 learners) were given the homogeneity test. The participants were given 60 minutes to answer the test's items. Having administered the placement test, 57 participants were selected of which 32 EFL learners were selected randomly to take part in this study as the members of experimental and control groups. The second step in the current research was to measure the EFL learners 's performance in grammar ability before the treatment. The participants were asked to answer a grammar test about simple present, simple past, present continuous, past continuous, and simple future tense in a 20 item multiple choice test in order to measure the learners 's grammar ability instruction Each candidate had 20minutes to answer the test.

As stated earlier, the homogenized learners were divided into two groups (experimental group and control group). Students in the experimental group received a google address to find the application, (English Grammar Ultimate Software) and installed it on their phones or laptops and brought it to the class. The control group, however, did not work with the application.

There were lots of examples and texts about tenses in the application. First the teacher read some examples of tenses in English grammar part

of app. Students guessed the structure of the tenses and then read them in the chart in the app and wrote them on the whiteboard and read how to make sentences section of the app. As it was mentioned in the instrument part, there is one part in the app which is about the explanation of the tenses. The teacher read and explained them for learners as they were represented in the application. An experienced English teacher taught tenses in 12 sessions. After that the teacher asked the learners make some sentences according to tenses in each session. The learners read them loudly. Whenever a mistake was made by the students, the teacher corrected it. Finally, in the Grammar Practice part of application, students answered 10 multiple choice questions about the tense, and they saw green color if they had chosen the right one and the red color for the wrong answer. After completing all the practices, the app showed the percentage of correct answers. Those students whose correct answers were lower than 50 percent retried it with new questions to have more exercises. On the other hand, students in the control group attended and participated in class where the teacher taught them the tenses in a traditional way in 12 sessions without using the app. Teacher wrote the examples of the tenses on the white board and students repeated them and wrote some new sentences themselves.

The last step in the current research was to measure the EFL learners' performance in the intended tenses after the instruction through English Grammar Ultimate software. The participants were asked to answer a grammar test about simple present, simple past, present continuous, past continuous, and simple future tense in a 20-item multiple choice test. Each candidate had 20 minutes to answer the test. To analyze the data, two paired sample t-tests were employed to compare and analyze the pretest and post test scores of the control group and the pretest and posttest of the experimental group. An independent sample t-test was employed to compare and analyze the post test scores obtained from two groups.

Results

In order to provide answer to the first research question, a paired sample t-test was run to compare within group scores for the control and experimental groups who worked with English Grammar Ultimate Software. The results have been shown in Tables 1and 2.

Table 1
Paired Samples Statistics for Control Group

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	**Pretest**	13,3125	16	2,44182	,61046
	Posttest	14,6875	16	2,18232	,54558

The results of the paired t-test showed that the participants' performance on grammar test in the control group improved 1.34 points from the pretest to the posttest (M pretest= 13.31; M posttest= 15.68). Paired t- test was used to see if this difference is statistically significant.

Table 2
Paired Samples Test for Control Group

Paired Samples Test

	Paired Differences							
				95% Confidence Interval of the Difference				Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	
Pair 1 pretest – posttest(control group)	-1,37500	,61914	,15478	-1,70492	-1,04508	-8,883	15	,142

The observed value of pretest and posttest of control group is larger than critical value at .05 level of significance. The results of paired sample t- test revealed that the control group's performance on posttest of grammar wasn't statistically different from their performance on pretest in the classroom.

Table 3

Paired Samples Statistics for the Experimental Group

		Mean	N	Std. Deviation	Std. Error Mean
Paired Samples Statistics					
Pair 1	Pretest(experimental group)	13,4375	16	2,58118	,64530
	Posttest(experimental group)	16,2500	16	1,73205	,43301

The results of paired t-test showed that the participants' performance on pretest in the experimental group improved 2.82 points from the pretest to the posttest (M pretest= 13.43; M posttest= 16.25). Paired t-test examined if this difference is statistically significant. (See Table 1).

Table 4
Paired Samples Test for the Experimental Group

	Mean	Std. Deviation	Std. Error Mean	Lower	Upper	t	df	Sig.(2-tailed)
Paired Differences				**95% Confidence Interval of the Difference**				
Pair 1 pretest – posttest(experimental group)	-2,81250	2,56174	,64043	-4,17755	-1,44745	-4,392	15	,000

The observed value of pretest and posttest of experimental group is smaller than critical value at .05 level of significance . The results of paired sample t- test revealed that the experimental group's performance on posttest of grammar was statistically different from their performance on pretest in the classroom . According to tables1 , 2,3 ,and 4 , there is a great and meaningful difference between the test scores of groups. It is crystal clear that the experimental group which worked with the application had a better performance in the posttest. Based on the results obtained from the statistics about the performance of the two groups in the pretest and posttest, it can be said that the Grammar English Ultimate has effect on grammar learning.

In order to provide an answer to the second research question, an independent sample t-test was run to make a comparison between two groups posttest (control group and experimental group). The results have been displayed in Tables 5 and 6.

Table 5
Group Statistics for the Post Test of Two Groups (Control Group &Experimental Group)

Group Statistics				
	N	Mean	Std. Deviation	Std. Error Mean
Posttest(control group)	16	16,2500	1,73205	,43301
posttest(experim ental group)	16	13,3125	2,44182	,61046

Table 6
Independent Samples T- Tests for the Posttests of Two Groups (Control Group &Experimental Group)

Independent Samples Test									
	Levene's Test for Equality of Variances		t-test for Equality of Means						
								95% Confidence Interval of the Difference	
	F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Posttest(control group &experimental group) Equal variances assumed	2,452	,128	-3,925	30	,000	16,2500	,74844	1,40899	4,46601
Equal variances not assumed			-3,925	27,045	,001	13,3125	,74844	1,40196	4,47304

The use of t test to compare the mean of grammar ability in the two groups is needed, but at first the data was analyzed by the Levine's test which showed that the variance between the groups is the same which means that if the significant level of Levine's test be more than 0.05, the variance of two groups is equal. According to table 6, the variable of grammar ability is represented by t= -3,925 that is meaningful against the amount of P<0/01. In other words, the mean of tense score of the two groups has meaningful difference. Considering the mean of the two groups, it is understood that mean of the grammar ability in the experimental group is more than the control group.

According to the statistical analysis described above, it can be concluded that assumptions needed to perform t- test were met. The results of statistical analysis showed that English Grammar Ultimate software can affect the grammar knowledge of Iranian EFL learners positively with the high level of effectiveness. The main goal of the present research was to investigate the effect of English Grammar Ultimate Software on the grammar knowledge of Iranian EFL learners. The data gathered through the posttest were analyzed by SPSS software. The use of t-test to compare the mean of grammar ability in two groups was needed, but at first, the data was analyzed by the Levine's test which showed that the variance between two groups is the same. The variable of grammar ability is represented by t= -3,925that is meaningful at P<0/01. In other word the mean of grammar scores of two groups has a meaningful difference. According to the research question and the mean of the two groups, it can be concluded that Grammar English Ultimate software had a positive effect on the use of the intended tenses of the participants.

Discussion and Conclusion

This study aimed to show the effect of using English Grammar Ultimate Software on improving the grammar knowledge of a group of Iranian EFL students. The results indicated that the experimental group who worked with English Grammar Ultimate Software outperformed the control group. Such a result is consisted with the findings of Rachels and Rockinson (2018) who concluded that some types of applications could improve learners' grammatical knowledge and some of them were useful for teaching grammar too.

As mentioned earlier, the results of this research revealed that the English Grammar Ultimate Software had a statistically significant effect on EFL learners' grammar knowledge. These results are in agreement with the findings of Huang and sun (2011), who concluded that m-

learning has great effect on the improvement of language grammar skills . The results of this study are in accordance with the findings of some other researchers who found the effectiveness of mobile assistance on grammar improvement of EFL learners and concluded that learners by using mobile applications had more improvement in grammar than those who have been taught by traditional classroom practices without any app and technology. (Clifton, 2006; Hee Jin ,2015; Thornton & Houster ,2005).

The results obtained from the current study are in accordance with the results of previous studie ,Salamat(2013) and Hashemi (2011) who demonstrated that mobile-assisted group outperformed those in the traditional group. Moreover, it must be mentioned that using mobiles can facilitate the education process due to the fact that, it is not restricted to inclass activities , students can learn anywhere at any time with the assistance of the mobile application) Cabrero, 2002). The results revealed that participants in experimental group who were taught through English Grammar Ultimate Software outperformed those in the control group. Given that most of the Iranian students have mobile phones, grammar practice on these devices can be simply incorporated as part of their daily regular activities. The conventional methods of teaching are considered to be the key reason for students' tedium and lack of motivation.

The reason that the students in the experimental group outperformed those in the control group may be due to the circumstance that, as Sharples (2005) and Clifton (2006) state, the use of mobile applications help learning become mutual, fun and precious for learners. Furthemore, as Kukulska-Hulme's (2006) states, mobile apps can be used anytime and anywhere and can have the role of a private teacher who can help the learners continually. The findings of the study can be used by EFL teachers teaching grammar to intermediate students. They can use mobile apps for teaching grammar in their classes. Material developers can also incorporate the use of mobile apps in their materials. Future research can evaluate the attitude of undergraduate and graduate learners in this relation. It is suggested that another study use a large adequate sample size to elicit perceptions of learners towards technology and learning.

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