

SHAD Social Network and EFL Learners' Writing Complexity & Accuracy

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Abstract

The present study was done to evaluate two dimensions of written language proficiency i.e., complexity and accuracy through SHAD application as a social network. Moreover, the study analyzed the participants' attitude towards the mentioned application. This research was a quasi-experimental study in which two groups were compared with each other. It also focused on the quantitative method and the questionnaire data were analyzed descriptively. To do this, a total of 80 twelfth grade high school students were selected based on the convenience sampling to participate in the present work to establish an experimental group (students learning writing under SHAD app condition) and a control group (students learning writing in class condition). The data were collected and moved to SPSS software and the output is firstly analyzed and then discussed and represented. That is to say, after a course of writing training, data analysis was done by using pretest, posttest and questionnaire results. The obtained results showed that the use of SHAD application had no significant impact on improving the accuracy of the student's writing skills, while it significantly affects improving the complexity of their writing skills. The study has also illustrated the positive students' attitude towards E-learning i.e., SHAD application. On the whole, the participants' overall satisfaction was confirmed by this study.

Keywords: Social Networking, SHAD Application, Writing, Complexity, Accuracy

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Introduction

Teaching and learning English in an old-fashioned way can cause the students to lose attention and be bored. Despite the necessity of online teaching and learning environment during Covid 19 pandemic, language learners taking online courses could face challenges and difficulties that they might never have faced in a traditional teaching and learning environment (Tsai, 2009), and these challenges could have negative impacts on the students' learning performance (Davies & Graffs, 2005). Some studies have revealed that students' satisfaction is an essential marker of the quality of learning experiences (Moore & Kearsley, 1996; Yukselturk & Yildirim, 2008). As Parsad and Lewis (2008) discussed, the quality of interaction in an online context largely depended on the technology tools and applications for learning. There are also some researchers like Artino (2007) and Puzziferro (2008) whom noted that online students who were unable to regulate learning efficiently were unlikely to be satisfied. Since online social applications have changed the way students interact with their teachers and classmates (Kaminski, Switzer, & Gloeckner, 2009), it is worthy to seek students' satisfaction in online learning settings.

Technology in teaching is the modern field today and many educators are expressing interest in bringing the best of it inside the classrooms (Laban, 2017). In recent years, use of computer as an instrument to facilitate learning for

language learner is expanded and learners have beneficial unmatched chance to use Internet and networks such as online classes to learn better. These are some of the most commonly used terms in the field of education and technology like distance learning, online instruction or E-learning (Hubackova, 2010). Moreover, networks and the widespread use of Internet have introduced unprecedented opportunities for language learners. Distance education or E-learning are some of the most popular learning modes recently being used in instructional and technological contexts. Communication is essentially the exchange of written or oral information and such kind of learning gives students opportunities of interactive spoken and written communication (Velentzas & Borni, 2014). Lucke and Rinsing (2014) stated that everyday use of technology has led to changes in our behavior and perception i.e., more often we use navigations in road trip or contacting friends (without knowing a single number) or etc. Our reliance on technology can lead us to a reduction in practical skills; however, the key to success is the ability to control knowledge acquisition. For this reason, the focus of education, in general, is to extend pure factual acquisition and tend to focus on a collaborative approach. The features of individuality, portability, and social connectivity have rendered mobile devices a potential tool for cooperative or collaborative learning. The collaborative setting

is where the learner is part of community independent of their physical or organizational environment. Social interaction between students enhances learning in the virtual world (Lucke & Rinsing, 2014). When moving from the teacher-centered context to student-centered setting, technology is the essential support to enhance the students learning. Such a context provides facilities and support students' learning activities. Recently, there has been a substantial increase in interest and activity in E-learning to increase quality in teaching and learning. Computer-based learning has influence on education by affecting learners' productivity (İşman et al., 2004). E-learning instruction provide valuable learning experiences for young learners and indicate a great effect on their learning and enhancement (Chen & Chan, 2006; Kerawalla & Crook, 2010; Sackes, Trundle, & Bell, 2011; Lim, 2012).

The emergence of English as the language for education, research and business necessitates the ability to write well in English. Writing is one of the most important skills in teaching and learning English while the significance of it has been recognized thoroughly by both learners and instructors. Meanwhile, writing skill is a common aim that many language learners look for it to attain. As Skehan (1996) suggested this common aim is related with improving accuracy and sophistication. Skehan (1996) identified accuracy as concerned

with "a learner's capacity to handle whatever level of interlanguage complexity she has currently attained" (p. 46). Based on this report if learners try to construct language with higher accuracy, they are looking for controlling over the semantic component that they have already learned. As a result., it may be secure to discuss that motivating learners to construct language with higher accuracy further than the use of controlled rather than automatic procedures. Further, since automatic procedures improve by controlled procedures (McLaughlin & Heredia, 1996), They think about accuracy to be nessery for the path language improve and becomes automatic. According to Foster & Skehan (1996), accuracy refers to "freedom from errors" and improvement in grammatical complexity as "progressively more elaborate language" and a "greater variety of syntactic patterning" (pp.303-304). The focus of this study is on two dimensions of written language proficiency i.e., grammatical complexity and accuracy. That is to say, they study analyzed the errors in the written English of EFL learners as an indicator of their developmental stage in syntax, morphology, and lexis. Accuracy refers to the ability of learners to exercise the maximum level of control to prevent errors during a language performance. In other words, accuracy refers to a learner reducing errors by avoiding challenging structures that can cause errors (Ellis, 2005). In order to examine the accuracy of

language produced by the students, researchers have analyzed the data in terms of how much of the utterances or compositions the students were produced without errors; that is, how many error-free clauses they produced. However, complexity arises from the learners' content knowledge and it is the most problematic construct. It is referred to properties of both tasks and language performance. Different aspects of complexity including lexical, interactional, propositional and various types of grammatical complexity are considered by the researchers of this paper.

In response to Iran's coronavirus outbreak in late February 2020, one of the government's first actions in Iran was to close schools and universities on March 5, leaving the education of millions of students in limbo. The prolonged shutdown has led to major challenges for students, parents and teachers. Therefore, Ministry of Education released the homegrown SHAD application on April 9, noting that more than 60 percent of students and 94 percent of teachers have so far attended 64 percent of classes through the SHAD app, whose acronym in Persian translates as the Students Education Network. Therefore, it is essential to examine how effective is tele-learning through SHAD application in teaching writing accurately and complexly. Moreover, in recent years there has been a decline in EFL students' language proficiency and they are thought to have insufficient exposure to the language at school

while it is being worse during coronavirus pandemic. One of the aspects of communicative competence is the ability to write well. There is a need to address this lack of ability to write well among high school students and one crucial aspect of being able to write well is to care about accuracy and complexity of writing. A good writer focuses not just on the organization and overall meaning of a written text but also engages himself on accuracy and complexity in writing activity, and this entails giving careful thought to the purpose of the text (Paltridge, 2004). One important section in new edition of English course book at high schools is writing which might be really challenging and problematic for the students. Accordingly, the present study aimed to examine how effective is tele-learning through SHAD as a mobile phone-assisted application in improving the accuracy and complexity of the 12th grade high school students' English writing skills. Considering the above discussion, the present study had three main objectives;

1. To analyze the effect of using SHAD on improving the writing accuracy of EFL learners.
2. To analyze the effect of using SHAD on improving the writing complexity of EFL learners.
3. To examine the learners' attitude towards the use of online learning i.e., SHAD application.

Therefore based on above objective the following research question are proposed:

Q1. What is the effect of using SHAD on improving the writing accuracy of EFL learners?

Q2. What is the effect of using SHAD on improving the writing complexity of EFL learners?

Q3. Do EFL learners have positive attitude towards the use of online learning i.e., SHAD application?

The use of SHAD application as a facilitative device is important to be used in the language class for a number of reasons. First it provides the learners with the required motivation to experience writing and improve it. Second, SHAD can pedagogically provide more opportunities to improve the writing independently and in a real context by communicating with their desired participants. It can also help the learners to focus their ideas on certain topics and context and in real situation. In addition, the use of technology in language teaching is contentious such disputes arise from the fact that "technology used in language teaching including educational application does not allow for personal face-to-face contact between students and instructors. The time lag in students' responses is another disadvantage. Meanwhile, since students are historically used to conventional and traditional classroom teaching and immediate interaction with teachers, they tend to resist change. Therefore, this study examines such matters concerning the methodologies of writing instruction" (Bani-Hani, 2014,

p.28). Over the past few years, the emergence of internet technologies such as weblogs, wikis, and social networks has radically changed education in general, creating new opportunities for foreign language learning and teaching. According to Amendum et al., (2011), the spread of internet is not simply a technological phenomenon but a social one that introduced entirely new approaches to generate and distribute web content. With the characteristics of internet which facilitates "interactive information sharing, user-centered designs, and online collaboration, a growing number of researchers and teachers have been exploring the ways to facilitate language learning by integrating various internet technologies in foreign language classrooms" Freedman (2009, p.208). Among various internet technologies, recently the use of social networks has been growing.

Method

Research design

The present study is a quasi-experimental in which two groups were compared with each other. The experimental group received instruction using SHAD and the control group is made up of the students learning in class condition without resort to the SHAD. They wrote on the given topics and received the required feedback from their teachers. Here the writing skill was experimented under two different conditions. Therefore, SHAD app was regarded as the independent variable, while writing skill was the dependent variable.

Study population and sample

A total of 80 twelfth grade high school male students made the population of this study. In order to evaluate the validity of the study and to ensure the homogeneity of participants, Oxford Placement Test (OPT) was given to them. After taking OPT test, homogenized participants were selected to establish the experimental and control group. According to Mackey and Gass (2013), convenience groups are those within a population that share similar characteristics. At the beginning of the research, three intact classes of twelfth grade high school included 80 students were chosen based on the convenience sampling to participate in the present work.

Instrumentation

Three instruments were employed in this study for data collection as Oxford Placement Test, Pre and Post Writing Test and a related Questionnaire.

Data collection

For conducting this study, at first three intact classes of 12th grade students were chosen by the researchers. In the second place, basic Oxford Placement Test was run for homogenizing them. After that, the researchers randomly put the students in two groups as 'control' and 'experimental' and pre-test was administered to all,

then treatment started after the completion of the pre-test. That is to say, the experimental group received treatment and they have been taught in SHAD application. In the experimental group, they were asked to get online at a specific time, three days a week. The participants were instructed sufficiently and they were asked to give one another feedback and give comments. The aim was to develop an environment that would illustrate how could better develop their writing's accuracy and complexity in social network setting. On the other hand, the control group received conventional method of teaching. In fact, they were taught and learnt under the supervision of the teacher in classroom condition. They followed the traditional teaching practices to write about the topics appearing in their textbook. It should be noted that same materials were presented in both groups and they were also instructed by the same teacher. The final phase was running a post-test for both groups, and a related questionnaire was published among the experimental group to explore the students' attitude.

Results

Analyzing research question 1.

What is the effect of using SHAD on improving the writing's accuracy of EFL learners?

Table 1- Descriptive statistics of accuracy in CG & EG in pre-post tests

Group Statistics				
Time	Group	N	Mean	Std. Deviation
Pre-test	Experimental	40	12.0750	1.09515
	Control	40	12.0500	1.06096
Post-test	Experimental	40	11.2750	1.98698
	Control	40	11.9500	1.06096

The mean score of the accuracy of writing skills in the pre-test of the control group was measured 12.05, and it was measured 11.95 in the post-test and the mean score of the accuracy of writing skills in the pre-test of the experimental group was measured 12.07, and it was measured 11.27 in the post test (Table 1). According to median, interquartile range and changes range in the box diagram, the distribution of accuracy score of students' writing skills in the control and experimental groups in pre-test and post-test was determined. It was revealed that

the mean scores of the pre-test which were shown with dashes in the diagram are not significantly different in two groups. The accuracy scores of the control group in the post-test were not different with the accuracy scores of the pre-test, while in the experimental group, a significant difference was found between the pre-test and post-test scores. In this regard, a significant difference was found between the scores of the post-test of both groups, while the accuracy of writing skills in the post-test was at a lower level.

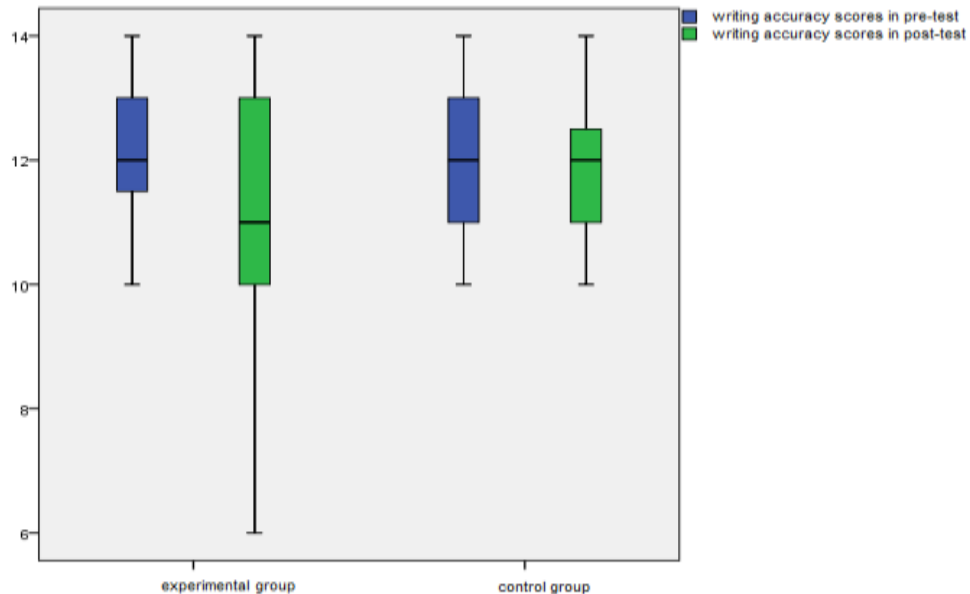


Figure 1- Box diagram of descriptive statistics of accuracy in CG & EG in pre-post tests

Table 2- Examining homogeneity of regression coefficients (slope)

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Writing accuracy scores in pre-test	7.714	2	3.857	1.490	.232	.037

In order to examine the homogeneity of regression coefficients (slope), the two-factor analysis of variance GLM test was used. As it is shown in Table 2, the calculated *p* value was 0.232 which was higher than the significance

level of 0.05. Therefore, it can be stated that the obtained data complied with the homogeneity of the regression slope and the ANCOVA test can be used.

Table 3- Analysis of covariance to examine effect of SHAD in improving writing accuracy

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Pre-test writing accuracy	.755	1	.755	.295	.589	.004
Group	9.173	1	9.173	3.583	.062	.044
Error	197.120	77	2.560			

a. R Squared = .048 (Adjusted R Squared = .023)

In the analysis of covariance table, since the value of figured *p* (0.062) is much more than the importance level of 0.05 ($\alpha = 0.05$), so at this level H_0 was not rejected, the mean score of post-test of accuracy of writing skills in the experimental group was

significantly lower than the mean score of post-test of accuracy of writing skills in the control group, so using SHAD application did not significantly affect improving the accuracy of writing skills of English language learners (Table 3).

Table 4- Kolmogorov-Smirnov & Leven tests normality assumption of writing accuracy

	Kolmogorov-Smirnov test		Leven test	
	Z	P value	F	p-value
Pre-test	1.916	0.051	0.037	0.848
Post-test	1.517	0.062	2.702	0.053

The validity of the statistical model (normality of score distribution and uniformity of variances between groups) was investigated using Kolmogorov-Smirnov test and Leven test. Since the calculated p values were not higher than the significance level of 0.05, the assumption of normality of score distribution and the assumption of the uniformity of

variances between groups was not rejected and as a result the statistical model was not violated (Table 4).

Analyzing research question 2.

What is the effect of using SHAD on improving the writing's complexity of EFL learners?

Table 5- Descriptive statistics of complexity in EG & CG in pre-post tests

Group Statistics				
Time	Group	N	Mean	Std. Deviation
Pre-test	Experimental	40	1.66	1.061
	Control	40	1.76	1.06096
Post-test	Experimental	40	11.27	1.987
	Control	40	11.95	1.061

The mean score of the accuracy of writing skills in the pre-test of the control group was measured 1.76, and it was measured 1.94 in the post-test and the mean score of the accuracy of writing skills in the pre-test of the experimental group was measured 1.66, and it was measured 2.3 in the post test (Table 5). According to median, interquartile range and changes range in the box diagram, the distribution of complexity score of students' writing skills in the control and experimental groups in pre-test and post-test was determined. It was revealed that

the mean scores of the pre-test which were shown with dashes in the diagram are not significantly different in two groups. But the complexity scores of the control group in the post-test were not different with the complexity scores of the pre-test, while in the experimental group, a significant difference was found between the pre-test and post-test scores. In this regard, a significant difference was found between the scores of the post-test of both groups while the complexity of writing skills in the post-test was at a higher level.

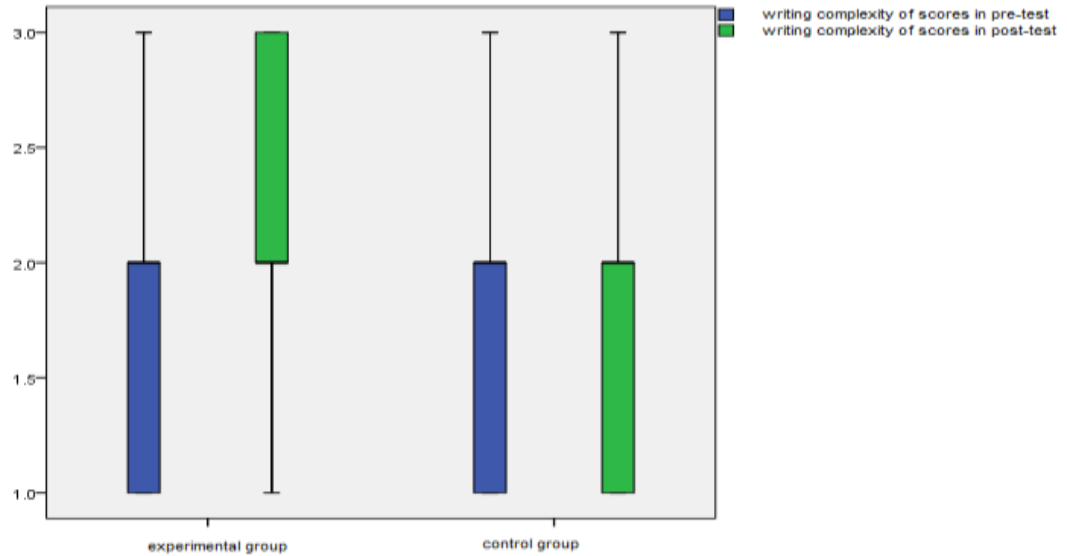


Figure 2- Complexity scores of writing skill in EG & CG in pre-test and post-test

Table 6- Examining homogeneity of regression coefficients (slope)

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Writing complexity scores in pre-test	2.135	2	1.067	1.979	0.145	0.049

In order to examine the homogeneity of regression coefficients (slope), the two-factor analysis of variance GLM test was used. As shown in Table 6, the value of figured p is 0.145 which is much more than the importance

level of 0.05. Therefore, it can be expressed that data comply with the homogeneity of the regression slope and the ANCOVA test can be used.

Table 7- Analysis of covariance to examine effect of SHAD in improving writing complexity

Tests of Between-Subjects Effects						
Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Pre-test writing complexity	0.811	1	0.811	1.549	0.217	0.02
Group	2.298	1	2.298	4.39	0.039	0.054

Error	40.3	77	0.523	-	-	-
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a. R Squared = .048 (Adjusted R Squared = .023)

In the analysis of covariance table, since the value of figured p (0.039) was less than the importance level of 0.05 ($\alpha = 0.05$), so at this level H_0 was rejected (H_1 was confirmed), that is the mean score of post-tests of writing complexity in the experimental group was significantly higher than the mean score of the control group, so using SHAD application showed a significant effect on improving the

complexity of writing skills of English language learners. Hence, according to the square of the Eta coefficient, the effect of using SHAD application in improving the complexity of English language learners' writing skills was 5.4%, and the statistical power of this hypothesis showed that with 0.99% confidence, it can be figured that the hypothesis Zero is rejected correctly and type II error has not occurred (Table 7).

Table 8- Kolmogorov-Smirnov & Leven tests to evaluate normality assumption of model in improving writing complexity

	Kolmogorov-Smirnov Test		Leven Test	
	Z	P value	F	p-value
Pre-test	1.46	0.051	0.113	0.738
Post-test	1.26	0.061	2.156	0.146

The validity of the statistical model (normality of score distribution and uniformity of variances between groups) was investigated by using Kolmogorov-Smirnov test and Leven test. Since the calculated p values were not higher than the significance level of 0.05, normality assumption of score distribution and the assumption of the uniformity of variances between groups was not rejected and as a result the statistical model was not violated (Table 8).

Analyzing research question 3.

Descriptive statistics analysis was done in order to explore the

students of the experimental group through a related questionnaire. The questionnaire adopted by Iyer (2011) and consisted 20 items about online learning. The questionnaire analyzed 20 items about the effectiveness of online course method. It is worth mentioning that the questionnaire was made valid and reliable by the researchers. To avoid any confusion and enhance validity, the Persian version of the questionnaire was used and the back translation by two experts in the field, and it was confirmed the original concept of the translated questionnaire. Also, length of the questionnaire and the questions

difficulty were modified by referring to the similar literature. In addition, the reliability of the questionnaire analyzed through Cronbach's alpha test and reported as .82 which is high. All the items presented in the form of 5-Likert

Scale ranging from "Strongly disagree" to "Strongly agree". Frequency, percentage and mean scores of all the statements were analyzed and then, the average of all items is displayed by the related table (Table 9).

Table 9- Descriptive statistic of questionnaire items

Item	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Total	Mean
1. It's important for me to spend some time in an online course	7 17.5%	8 20%	3 7.5%	10 25%	12 30%	40 100%	3.3
2. I did as much as I am supposed to do in the online course.	7 17.5%	6 15%	2 5%	14 35%	11 27.5%	40 100%	3.4
3. I know my goal to reach in an online course.	6 15%	9 22.5%	2 5%	13 32.5%	10 25%	40 100%	3.3
4. I know what exactly I want to find in an online course.	8 20%	6 15%	0 0%	14 35%	12 30%	40 100%	3.4
5. I find the work I am doing in the online course.	5 12.5%	8 20%	0 0%	12 30%	15 37.5%	40 100%	3.4
6. I organize my time to do online activities.	10 25%	7 17.5%	0 0%	13 32.5%	10 25%	40 100%	3.1
7. I find the online course as a prime concern in my life out of school.	9 22.5%	6 15%	5 12.5%	12 30%	8 20%	40 100%	3.1
8. At First, I finish other activities Then I start doing my online work.	10 25%	8 20%	2 5%	10 25%	10 25%	40 100%	3.05
9. Online courses are more dynamic than school hours for me.	5 12.5%	5 12.5%	2 5%	13 32.5%	15 37.5%	40 100%	3.7
10. Online courses are very useful for my school courses.	7 17.5%	6 15%	1 2.5%	12 30%	14 35%	40 100%	3.5
11. It is easy to use online course system.	5 12.5%	8 20%	3 7.5%	12 30%	12 30%	40 100%	3.45
12. Materials in online courses are proper to my level.	6 15%	6 15%	0 0%	14 35%	14 35%	40 100%	3.6

13. I have no trouble in doing activities in online courses.	8 20%	8 20%	0 0%	15 37.5%	10 25%	40 100%	3.3
14. Multimedia used in online course increase my understanding.	6 15%	7 17.5%	3 7.5%	13 32.5%	11 27.5%	40 100%	3.4
15. Courses in online system are amusing for me.	6 15%	4 10%	0 0%	18 45%	12 30%	40 100%	3.6
16. I am satisfied with the activities in online courses.	7 17.5%	4 10%	0 0%	17 42.5%	12 30%	40 100%	3.5
17. It is easy to get high grades in online courses.	7 17.5%	10 25%	0 0%	11 27.5%	12 30%	40 100%	3.5
18. I help my friends in online courses.	6 15%	6 15%	0 0%	13 32.5%	15 37.5%	40 100%	3.1
19. I have no difficulty in finishing the tasks in online courses.	8 20%	7 17.5%	3 7.5%	11 27.5%	11 27.5%	40 100%	3.2
20. I am not anxious in finishing the tasks in the specified time the teacher give us.	5 12.5%	5 12.5%	4 10%	13 32.5%	13 32.5%	40 100%	3.6

Analysis of the first item indicated that more than half of the participants (55%) noted that It was important for them to spend a certain amount of time online, 37.5% did not agree, and a small percentage (7.5%) had neutral idea on the first item. Analysis of the second item showed that about 62.5% of the students said that they did as much as they were supposed in the online course. However, 32.5% of them disagreed and 15% had neutral opinion. Once again, the analysis of the third item revealed that more than half of them (57.5%) knew their goal to reach in an online course, while, 37.5% disagreed and 5% showed their neutral view on the statement. Analyzes of item four highlighted 65% knew what they were trying to achieve in an online course. Only, 15% of members revealed

their disagreement and nobody had neutral idea.

Item five investigated the students' understanding in online learning and the results indicated that 67.5% understood the work they were doing in the online course, but 32.5% disagreed and nobody had neutral idea on this statement. The analysis of next item showed that more than half of them (57.5%) set out their time to do online activities, whereas 42.5% of members didn't set their time. Based on the analysis of item seven and eight, exactly half of the participants (50%) saw the online course as a prime concern in their life out of school a in my life out of school and started doing their online work after they finished other activities. As it can be seen from the above table, exactly 70% believed that online courses were more dynamic than school hours

for them, whereas 25% disagreed and 5% showed their neutral idea on the mentioned statement. Besides, a high percentage (75%) thought that online courses were very useful for their school courses.

Based on the information of the table, once again, a great percentage of the students (75%) uttered that it was easy to use online course system. 25% of them disagreed and a nobody reflected their neutral views. After that, 70% of the participants agreed that materials in online courses were proper to their level and the same percentage (70%) had no difficulty in doing activities in online courses. Then, 62.5% of the students stated that multimedia used in online course increased their understanding. However, 37.5% did not agree and nobody showed their neutral idea. The result of table 4.9 indicated that a great percentage (80%) of the students were satisfied with the activities in online courses., but 26.67% of them disagreed and a small percentage showed their neutral opinion. Also, a high percentage (70%) of the EFL learners noted that felt that it is

easy to get high grades in online courses, but 30% of them demonstrated their disagreement. Once again, as the table showed, 70% of the students agreed that they help their friends in online courses. Finally, 72.5% of the students of the experimental group noted that they had no trouble in finishing the tasks in online courses, and 65% felt they were not anxious finishing the tasks in the specified time the teacher gave them.

In addition to the above table, table 10 analyzed the mean scores of each item of the questionnaire. The results indicate "Strongly Agree" received the first rank with the highest mean score (32.55). After that, " Agree" received the second rank with the mean score of 30.05, and "Strongly Disagree" placed the third rank with the mean of 17.25. Then, "Disagree" received the fourth rank with the mean score of 16.00 followed by "Neutral" as the last rank in the table with the lowest mean score (4.15). Therefore, it can be inferred from the following table that most of the students indicated their agreement on the mentioned items of the questionnaire.

Table 10- Mean score of the questionnaire options

N	Options	Mean Score	Rank
1	Strongly Agree	32.55	1 st
2	Agree	30.05	2 nd
3	Strongly Disagree	17.25	3 rd
4	Disagree	16.00	4 th
5	Neutral	4.15	5 th

Discussion

Learning by using computer and mobile-assisted applications can make the learners more motivated in cooperation and this cooperation can lead to students' active learning promotion. Since the researchers have access to a limited number of participants, it may decrease the generalizability of the findings. Other limitation referred to online activities that the participants might not be familiar with them. It was also impossible for the researchers to restrict the network activities to writing skill. In this study the effect of implementing SHAD application on improving 12th grade high school students' writing accuracy and complexity has been studied. And as it was mentioned in previous parts, this study has been done based on three research questions about the effect of SHAD application on improving accuracy and complexity of writings and the attitude of the learners toward the use of such technologies in learning writing. Here to answer the first research question, the data in table 1 to 4 can help. The data indicated that the students who were exposed to SHAD application could not significantly improve their writing accuracy, in comparison with the students who were taught under class condition. In fact, this study revealed that SHAD had no remarkable impact on making the writing's accuracy of EFL learners better. Perhaps low English proficiency students lacked online learning skill and experiences in self-directed learning. They might

not be ready for receiving online treatment. Moreover, it seems that most students still needed time to adapt themselves to a new learning context since they had been learning in traditional context for a long time and are still attached to it. More importantly, students' readiness for online learning context should be considered before the course begins. Some EFL learners need to prepare themselves to deal with changing educational setting. The measurement would contain language learners' preference and style of learning, confidence and competency in using Internet, positive attitude towards online learning, and ability to engage in self-direct learning. Above all, online EFL learners need considerable assistance and guidance and it seems that the materials and treatment did not cover the students' needs in terms of writing accuracy.

To answer the second research question, the data in table 5 to 8 can help. The data indicated that the students who were exposed to SHAD application could significantly improve their writing complexity, in comparison with the students who were taught under class condition. In fact, this investigation revealed that SHAD had a remarkable impact on making the writing's complexity of EFL learners better.

To answer the third research question, the attitude of the EFL learners (EG) toward the use of online learning was examined through a related questionnaire. According to the received data,

more than half of the participants (more than 50 %) believed that It was important for them to spend a certain amount of time online and they set out their time to do online activities. they knew their objectives to reach in an online course and saw it as a prime concern in their life out of school. After that, most of them (more than 60 %) said that they did a lot in online classes and knew what they were trying to achieve. They understood the work they were doing in the online course. In their views, this course was more productive and beneficial than school hours for them. They agreed that materials in online courses were proper to their level and they had no difficulty in doing activities. Also, they were not anxious in finishing the tasks in the specific time the teacher gave them. Then, a high percentage of them (70% and more) got high grades in online courses, they had no difficulty in completing the tasks and they helped their friends in such courses. Finally, a great percentage of them (80%) were content with the activities in online courses.

The results of this study are in line with the findings of Chen and Hsu (2008) and (Attewell, 2005), whose results provided evidence for the positive effectiveness of mobile assisted learning strategies on writing. Besides, Alsadhan, Alhomod and Shafi (2014) indicated the designing and integration of multimedia in online courses is important since they play an enormous rule to continue into E-learning and also make them

pivotal to provide for high quality E-learning. Additionally, the findings of this study are in accordance with the previous studies which proved that online learning helps to improve students' skills e.g., Appana (2008); Pratama (2015) and Ekmekçi (2016). They indicated the positive effect of using this method on students' achievement. Regarding the students' attitude, the results of this study are not in line with Kuama and Inthataksa (2016). They stated that learning English through traditional learning is more effective than the mobile assisted learning strategies. In their views, when the academic success of the students is considered, deductive teaching and teacher-centered learning is slightly more effective than inductive teaching and mobile assisted learning strategies although there is no significant difference according to statistical data. Another principal finding of their research is that the learners who want to give a speech feel better when they present English deductively. These findings suggest that in teaching English to learners who are adults, a learner who want to present something should be aware of the demands and discernment of their students. However, the current study examined the attitude of teenage students towards online learning context. That is to say, the participants of this study were not adult learners and they did not study in academic context. Most of the teenagers prefer more enjoyable and comfortable classes as having freedom to complete

their assignments. They are also interested in experiencing new learning style and context. Most of them are not aware of the importance of the English language learning and they do not have distinct needs and requirements as adults. However, as Osgood-Treston (2001) noted, adult learners mainly search for suitable learning environments which allow them to adapt to the role of student while managing with the many demands from other work and life domains. Moreover, adult learners who feel unsupported in an online course may not participate more in English online classes in future (Park & Choi, 2009).

Conclusion

According to Fisher and Coleman (2001), one of the choices that teachers make for enhancing students' motivation, is learning through using new technology and collaboration which have a remarkable impact on promoting active learning. And this collaborative learning takes on variety of forms in an active process such as use of computer or mobile phone technology as a medium and tool. Today social network as a facilitator gets the students engaged in collaborative learning. Besides, there are many researchers conducting the studies to provide the implications on the use of computer and mobile phone in foreign language classes. Teaching a language implies four skills of speaking, writing, listening, and reading, each of which needs different techniques and activities. Today teaching

writing is one of the problems the teachers face with as most of the students are not satisfied with their learning methods. Therefore, students' motivation in learning has become an important fact for the teachers. Here, in this research, using SHAD application has been examined as a mobile phone-assisted application in improving the accuracy and complexity of EFL learners' English writing skills.

The skill of writing effectively is vital to functioning in everyday life. One of the most important challenges that learners will face during the process of second language learning is writing. Therefore, they need a source to refer to in order to know how to write well. Since the appearance of computer and mobile phone-assisted applications, ways of obtaining information have changed. Face to face learning seem to be losing popularity among EFL students over their electronic counterparts. In addition, the students who are interested in using SHAD were directed to use SHAD application which indicated that these kinds of applications are very helpful tools in presenting and drilling forms of wiring, since they draw learners' attention and make these often-boring activities more enjoyable. And that is exactly what teachers need when presenting new language – to catch their learners' full attention, to raise their interest in the presented subject and hence their motivation.

Mobile-assisted classes can encourage and reinforce every member of each group to work

with emphasis on audio-visual activities. On the other hand, low level learners can benefit from their pairs within each group in consulting them and being guided in leaning writing skills. Also, the role of the teacher has undergone some changes. It turned into guiding the students to learn, encouraging them, and reinforcing them to accomplish the activities they had to do and facilitating teaming. Since acquiring a second language involves different areas such as motivation, students' need, learning environment, interest and language awareness. It is becoming increasingly difficult to ignore the role of students' interest to use modern technology during the process of language learning. This new method proves to be a key feature of effective teaching and learning as the language teachers are invited to change from the traditional methods and adopt new ones that depend on support and assistance. Providing support and assistance to students by instructional innovative method enhance student learning. On top of that, they should design the online learning carefully and the preliminary English education programs should be test in terms of online course, and teachers at preliminary classes should motivate students more and support them to use online course more, such as a course that enhances collaboration among the language learners.

Implications of the Study

According to Freedman (2009) as internet facilitates interactive

information sharing and online collaboration, most of the teachers are looking for a way to use online tools to help the students improve their language skills. This study can be done in an academic context i.e., university with a larger population to reach a more reliable result. The study also investigated the role of SHAD app. on improving the writing skill of EFL learners. It is recommended to investigate the impact of other social network applications as Adobe Connect, Big Blue Button, etc. on the other language skills as listening and reading. Additionally, it is suggested that the same study be replicated in a context in which the learners undergo a different and longer intervention. In fact, education has been changed in general by internet technologies and social network. Based on the result of this study, using SHAD application in writing can make the students more motivated in learning and help them to improve their accuracy and specially complexity of writing skill as they can learn in a real context by communicating with their participants. They can share their knowledge or ideas about a topic. The results can provide language teachers use different applications in their classes since participants' attitudes were positive towards working with the SHAD application. On the other hand, online learning can help the English language teachers to benefit from the suggested application, and the results can contribute to improving the process of teaching English in general and

writing skill in particular. As it was mentioned previously, the use of this technology is not helpful in speaking and listening but it can have a positive effect on writing skill also it can be helpful in reading skill and these two skills' sub skills such as vocabulary and grammar as well as complexity and accuracy of writings. To apply such a method, the learners' age and level are two important factors as this method might not be suitable for children or basic level students. Children have to use such facilities under the control of the teacher or their parents and it is not easy to do so. Besides, they might want to try anything new which can be harmful for them. Also, before using such methods, they have to be familiar with some principles. Therefore, it is too early for them to use these technologies. About the teenagers and adults, it can be said that they try to follow anything new and more interesting on the internet for example, they mostly follow news and they are not that much eager to use these facilities to help them learn something. Besides, their time is more limited than the children's time.

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