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Learning Vocabulary Electronically During COVID-19 Pandemic: Does Shaad Platform Have Any Impacts on Iranian EFL Learners' Vocabulary Learning?

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Abstract

The perceived outbreak of COVID-19 has forced the closure of schools in Iran. Alternatively, e-learning has emerged as a viable replacement for training students. The present study examined the comparative effects of applying Shaad as online learning versus face-to-face teaching on English as a Foreign Language (EFL) students' vocabulary learning. To achieve this aim, sixty ninth-grade high school students were randomly selected. The members of the study were assigned to the Shaad and control groups. The instruments were a Cambridge Placement Test (CPT) and a researcher-made test administered as a pre-and post-test. First, the CPT was used, then a pre-test was administered to members of both groups. EFL learners' vocabulary learning was analyzed at the end of the research; thus, the students in both groups performed the vocabulary post-test. Descriptive statistics and independent samples t-tests were run to determine the effect of Shaad on Iranian EFL learners' vocabulary learning. The results revealed that teaching vocabulary through Shaad as online learning did not have a statistically significant effect on EFL students' vocabulary learning. The results also showed a significant difference between the vocabulary learning of EFL students exposed to face-to-face teaching and those exposed to Shaad; thus, face-to-face learning is more effective. One of the study implications is that policymakers might provide infrastructure for virtual education to contribute to the improvement of EFL learning along with face-to-face education after the Covid-19 pandemic. Also, material designers can remove the deficiencies of the Shaad platform to develop the student's vocabulary learning as an instructional aids tool.

Keywords: Face-to-face Teaching; L2 Vocabulary Learning; Shaad Platform; Mobile-assisted Learning; EFL Learners.

1. Introduction

Vocabulary learning is recognized as an indispensable element in language learning (Baleghizadeh, 2018). Vocabulary is regarded as a constitutive element of every language, and "they are central to listening, speaking, reading, and writing" (Webb & Nation, 2017, p. 13). The role of vocabulary has been identified as a fundamental element of reading understanding and a contributor to the use of reading as a learning medium (Rasinski & Rupley, 2019). Correspondingly, if we do not understand a number of the vocabularies we face, we could also be incapable of knowing what we listen to or read. It is obvious that readers with a depth of

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vocabulary tend to be more proficient and competent readers to comprehend that text (Rasinski & Stevenson, 2019). Rasinski and Rupley (2019) believe that "enrichment and extension of vocabulary facilitate the readers to process the text and involvement with the writer's writing" (p. 51). They also stress that vocabulary learning must offer "exercise and utilization of the novel vocabularies in reading, speaking and writing" (Rasinski & Rupley, 2019, p. ix).

Vocabulary information has been recognized as one of the principal pivotal parts of a second or foreign language learning to the degree that some specialists declare that "learning a second or foreign language mostly implies learning its lexicon" (Gass, 1999, p. 325). As a result, some researchers have tried to offer various techniques, approaches, strategies, and exercises for vocabulary learning and retention. According to Uberman (2006), vocabulary learning is "a complicated subject predominant to overall foreign language proficiency. It involves the capability to understand as well as implement lexical items properly to context and setting of use" (p. 33). Vocabulary learning is not a simple task and is affected by several roadblocks, for example, forgetting the word, retaining the word without understanding how to use it, forgetting the pronunciation, etc. Nation (2001) remarks that readers need to comprehend at least an enormous amount of the vocabulary during a text to know it. Without knowledge of the fundamental vocabulary in a text, a learner may have serious problems understanding the message. So, learning words is critical in order to comprehend texts, and it determines how well learners can understand the texts they read.

To tackle the vocabulary learning challenges among language learners, different ways have been suggested to overcome this problematic component of language learning. Among numerous ways, using mobile applications as online learning (e.g., Shaad) may improve vocabulary learning (Alhadiah, 2020; Chwo et al., 2018; Hashemifardnia, et al., 2018; Lam, et al., 2018). Shaad in Persian literature stands for the Educational Network of the Students, an academic platform that was started following the spread of the Coronavirus because of the absence of learners in classes in Iran. The Ministry of Education owned the platform, and learners, instructors, and principals were the people who utilized this platform. In the beginning, the Shaad platform was run particularly on messaging apps, and users needed to put in one among the Rubika, Soroush, Gap, I-Gap, and Bale messengers. Later, the Ministry of Education introduced the platform without requiring those messengers (Hemati Rad, et al., 2021; Sargazi, et al., 2020). Nearly 70% of Iranian pupils comprise members of this social network, estimated to be more than 17 million people. The improvement in technology has considerably expanded the present context in the realm of education over the last few years. The extensive application of mobile wireless technologies has generated more possibilities to turn the conventional academic context into learning by mobile. Due to the importance and effectiveness of modern technologies, especially language learning with mobile assistance (MALL) in the area of learning a second/foreign language, several investigations (e.g., Estarki & Bazyar, 2016; Fageeh, 2013; Jafarian, et al., 2012; Khansarian-Dehkordi & Ameri-Golestan, 2017; Khubyari & Narafshan, 2016; Najmi, 2015; Rezaei, et al., 2014; Sorayyaei Azar & Nasiri, 2014) have been conducted in developing various components of foreign language learning.

While English is being applied extensively in different aspects of life, examining diverse approaches to developing and learning English stands crucial. It is apparent that students in EFL environments do not contain many possibilities for exposure to English;

accordingly, EFL learners have difficulties in applying this language. Though, learning vocabulary is done through various approaches in formal education. Some learners remember vocabulary lists without any concentration on the pronunciation hints, although learning words in separation is an unavailing work as students have no understanding of the usage. Thus, they do not recognize the earlier learned details to apply them in a suitable setting; therefore, one of the principal issues is the necessity for promoting practical pedagogical techniques for the instruction of foreign language words. Thus, the current study investigates the effectiveness of the Shaad platform since it explores the effects of applying Shaad as online learning versus face-to-face teaching on ninth-grade students' vocabulary learning during the Covid-19 pandemic. How students of EFL can acquire new words has been controversial. The vocabulary learning may be enhanced by applying online learning, especially during the Covid-19 pandemic. Consequently, this investigation was designed to examine the usefulness of utilizing Shaad as an online learning tool compared with regular classes in improving the vocabulary learning of ninth-grade high school students.

Despite every investigation administered until now, an imperative need is perceived for more extra study to accommodate an exact look at the influences of vocabulary accomplishment learning through mobile. Most of the previous research has examined the effectiveness of implementing particular computer-aided language learning (CALL) programs to develop and enhance the language skills of students in English; such as Pham and Vo (2021), Sabir et al. (2021), Wang et al. (2021), Saidi and Afshari (2021), Enayati and Gilakjani (2020), Ratnaningsih, et al. (2019). In this regard, to realize the aim of the investigation, the following research question was proposed:

Q1. Does Shaad platform as online learning have any statistically significant effect on EFL students' vocabulary learning?

2. Review of Literature

The MALL, pedagogical merits and demerits of mobile learning, and related empirical studies on vocabulary learning by MALL are reviewed in this section.

2.1. Mobile-Assisted Language Learning (MALL)

A kind of learning is done by means of mobile devices called mobile learning. Shield and Kukulska-Hulme (2008) defined mobile learning as the learning tools which are consistently available everywhere and anytime; There are increasingly new investigations that examine language learning by numerous mobile devices. Recent inquiries capitalize on the widespread features of mobile devices, such as apps (Bateson & Daniels, 2012), podcasts (Rosell-Aguilar, 2007), mobile-based emails (Kiernan & Aizawa, 2004), mobile web browsers (Stockwell, 2007), and short message service (SMS) (Levy & Kennedy, 2008). The 'Digital Natives' can complete multiple tasks directly and thus are ready to use various channels of information concurrently. Traxler (2007), concerning the major advantages of mobile learning, implies that this permits students to "exploit a little time and space toward learning" (p.8). As stated by Samsiah and Azidah (2013), the concept of MALL is emerging, and ambiguous and many are applying it because of its transferability, and the truth that nearly every individual has a smartphone.

According to Najmi (2015), mobile phones remain the most influential communication instruments among all modern communication devices, even better than chat or email since they may be utilized for learning, notwithstanding their technical limits. Based on this kind of learning device, the students are able to control their learning process and improvement within their own space depending on their cognitive status. E-learning empowers learners to remember their lessons in a non-classroom situation while they are at their individual computers offline or online. Students may take the learning process outdoors, on the bus, or working part-time by mobile phone or m-learning. In fact, they can learn every time and everywhere they are (Khabiri & Khatibi, 2013). Momeni (2022) suggests Cake software as a platform for English language learners to improve their speaking and listening capabilities. The app is primarily intended to assist language learners in enhancing their learning experience through watching videos that focus on situation-specific linguistic material. Furthermore, the application may aid English language teachers in introducing the app to the learners as a supplementary resource.

Moreover, it is often speculated that instruments are utilized outside of school. Thus, these devices are going to promote student autonomy. Kemp (2010) discovered that about seventy-five percent of native speakers typically practiced what is defined as textisms – short terms in spelling and spacing due to space restrictions and typewriting challenges – while writing SMS messages. In this way, students usually utilize mobile instruments for individual goals, which affects how they are used for learning purposes. The complexity of MALL reflects a field that is still in the making, and that is trying to negotiate the best research methods and the best classroom practices in order to make sense of the impact of mobile devices in language education (Pérez-Paredes, 2019). Pérez-Paredes and Zhang (2022) contend that it is essential to shift our focus away from device-oriented pedagogies to more socially situated practices that take stock of new ecologies of language use.

2.2. Pedagogical Merits and Demerits of Mobile Learning

Mobile learning possesses various beneficial characteristics that benefit scholars in some ways. Regarding connectivity, the design of the mobile system needs to be connected and shared on the learning website utilizing the instrument's wireless network to access global learning material, including emails and SMS (Lam et al., 2018). While an instructor applies each sort of technology inefficiently, learners would acquire it passively (Alhadiah, 2020; Humes & Raisner, 2010). Accordingly, Pourhosein Gilakjani, et al. (2013) suggest that while using technology, a pedagogy is required "to shape their teaching with" (p. 49). Norazah et al. (2010) agree that applying learning theories and technological tools is necessary. According to Thomas and O'Bannon (2013), not many types of learning can be applied as a framework while integrating mobile devices with learning. The first is behaviorism which proposes feedback and reinforcement promoted through specific utilization of the devices. Another is the constructivism view, which requires a great deal of simulations, and employs different media and immersive situations. The other approach implies situated learning, where learners learn within the context related to their majors. It is also applicable because of mobile's transferability characteristic, and learners could explore solutions or knowledge in the setting. Finally, collaborative learning could be utilized since this encourages investing and sharing learner and instructor sources. The collaborative learning approach suits mobile devices most

desirable because it implies both convenience and universality, empowering students to write and share instantly with one another.

Since mobile technologies offer many benefits: low cost, flexibility, user-friendliness, and small size, researchers are investigating how mobile technology can help in learning a language (Huang et al., 2012). Yet, there are also noticeable drawbacks, such as the little estimate of the screen, restricted graphic presentation (Albers & Kim, 2002), and the dependency on networks that do not continuously supply extremely high transmission power and can be disrupted in many varieties of ways. However, there are also downsides to using MALL as a function of the aim of the lesson. Beatty (2013) pointed out that using MALL would not assist the learners to practice copying and writing skills however MALL might be the simplest and most cost-effective way for the learners to obtain information by just taking pictures. In spite of these deficiencies, Thornton and Houser (2005) suggest that mobile instruments can be useful devices for providing learners with language learning materials.

2.3. Related Empirical Studies on CALL, MALL, and Vocabulary Learning

To begin with, Shokrpour, et al. (2019) tried to examine the efficacy of CALL learning the vocabulary of EFL learners. The result indicated that the CALL-trained treatment group acted better than the control group. In addition, Jafarian et al. (2012) analyzed the effect of CALL on EFL learners' writing achievement. CALL users' attainments in learning a language were meaningfully more than nonusers. The results of Fahim, et al. (2011) indicated that e-mailing's effect on the retention of vocabulary caused a significant shift in the retention of vocabulary learning among intermediate EFL students.

Recently, based on Kaviani (2022), Instagram learning brings valuable technological and pedagogical advantages for Iranian EFL learners despite the popularity of social networks. It has a significantly positive effect on the development of vocabulary learning among Iranian pre-intermediate EFL learners. Barrot (2021) did an organized literature review between 2008-2019 on the context of learning a language using social media. The results showed that platforms with a high number of users, such as Skype, Twitter, Facebook, and WhatsApp, continued to draw the most prominent concentration of investigators in the field of learning a language. Moreover, the analysis of García-Gómez (2020) tried to investigate learners' perceptions regarding the influence of the WhatsApp platform in their learning process. The findings revealed that the absence of pragmatic competence in the role of the members restricted learners from speaking efficiently. Such pragmatic defeats had a harmful influence on their interpersonal associations and made them acquire opposing viewpoints towards the employment of WhatsApp as an instrument for learning. Furthermore, Makalesi (2018) aimed to determine learners' viewpoints on the impacts of a Multiresolution Analysis of Voice Localization (MAVL) application on their process and methods of learning influence their opinions. The consequences showed that learners perceived the MAVL application as efficient, motivating, and valuable. The conclusions showed that members discovered the video and graphic explanations more beneficial, and their opinions varied, including their learning styles. In another study, Alnujaidi (2021) examined EFL instructors' views on the implementation of MALL in Saudi Arabia. The results indicated that regarding the informational, personal, and

management levels, the contributors had high apprehensions, and regarding consciousness, refocusing, cooperation, and result levels minimal apprehensions were observed.

Most importantly, there were some studies related to English vocabulary learning through MALL. According to Alhadiah (2020), who investigated the viewpoints of Saudi EFL learners about the utilization of the Quizlet for vocabulary learning, the outcomes of the investigation demonstrated that the learners expressed positive opinions regarding learning of English lexicon by the means of Quizlet. The participants noticed this application as beneficial because simple to practice, and learners plan to practice it in the future. Results of Hoi and Mu (2020) showed that learners displayed a more powerful desire for instructors' orientation via proper application of mobile devices toward learning a language both outside and inside the class than instructors' illustration of mobile-aided learning exercises in the classroom. Furthermore, Rezaei et al. (2014) analyzed the application and efficiency of mobile applications such as BUSUU and Interactive English in English vocabulary learning. The data showed a positive shift in students' achievement and utilizing these applications assisted in improving the learning of vocabulary, trust, and class participation, which learners had a positive tendency toward the application of multimedia in teaching. Furthermore, Khansarian-Dehkordi and Ameri-Golestan (2017) were scrutinized the impacts of Line social networking on EFL students' vocabulary learning. The outcomes of the analysis demonstrated that individuals of the experimental group performed better than the control group. Thus, these outcomes had considerable implications for theory and pedagogy, particularly socio-cultural theories of second language development. At last, Fageeh (2013) examined the advantages of smart phone applications concerning their capacity to enhance vocabulary learning and motivation. In this investigation, the smartphone treatment group outperformed, showing enhanced vocabulary learning and motivation perceptions. Also, the analysis of knowledge demonstrated that the utilization of smart phones might be a practical vocabulary teaching/learning approach at the school level. Similarly, the results of Yüksel, et al.(2020) showed that the learners learned more technical vocabulary by digital flashcards versus wordlists. However, the rise of mobile learning has been challenged by the negative perspective on the misuse of mobile devices and the internet by learners. The results of Adara (2020) suggest that MALL has no impact on learners' autonomy and motivation. It means that participants prefer to be guided by teachers instead of being autonomous learners.

Some researchers examined the effect of applying MALL on improving four language skills. For example, Khubyari and Narafshan (2016) explored the influence of MALL on EFL learners' reading comprehension. The outcome showed that EFL students benefit reading comprehension through mobile phones since the availability is simplified through the portability and convenience of mobile phones. Similarly, Najmi (2015) studied the impact of MALL on EFL writing. The outcomes revealed that the experimental group exceeded the control group that used pencil and paper. Furthermore, Sorayyaei Azar and Nasiri (2014) tried to examine EFL students' ideas about the usefulness of MALL on their listening comprehension. The conclusions showed that the cell phone-based audiobooks treatment group did better in listening comprehension compared to the control group.

The literature review shows that not numerous investigations to date have carried comparative research investigating the effects of using Shaad as online learning versus face-

to-face teaching on EFL students' vocabulary learning. The aim of the present investigation was, consequently, to try to provide and fulfill this gap. As stated earlier, some researchers such as Alhadiah, (2020), Chwo, et al. (2018), Lam et al. (2018), Hashemifardnia et al. (2018), Khabiri and Khatibi (2013), Stockwell, (2007), Khubyari and Narafshan (2016), Rezaei et al. (2014), Khansarian-Dehkordi and Ameri-Golestan (2017), Sorayyaei Azar and Nasiri (2014), Fageeh (2013), Najmi (2015), Jafarian et al. (2012) concentrated on the importance and impacts of MALL on developing foreign or second language learning. Despite what has been mentioned, no research study explored the influence of applying Shaad platform on the vocabulary learning of Iranian EFL learners. Thus, to fill this gap, the present research was designed to investigate the impact of utilizing online instruction on learning vocabulary among EFL learners compared to face-to-face instruction.

3. Method

3.1. Participants and Setting

Sixty intermediate EFL students were randomly selected from a public high school in Neyshabur, Khorasan Razavi, Iran to participate in this research. The age range of participants was from 15 to 16 years, with a mean age of 15.6. The student's mother tongue was Persian, and they learned English as a foreign language. The members of the study were assigned to the Shaad and control groups randomly. The first class of participants was 30 Iranian female ninth-grade high school students as the Shaad group, i.e., the experimental group. In addition, the second class of participants, the control group, was 30 ninth-grade female students the members of the face-to-face instruction group who received the instruction through face-to-face teaching. The teaching procedures were the same in both groups. At the beginning of the school year, the classes were held in a face-to-face manner with the permission of the Covid-19 pandemic National Headquarters and the Ministry of Education. Thirty students attended the regular classes with the consent of their parents; they were assigned to the control group, 30 learners had access to cell phones, and Shaad was assigned to the experimental group. This research was accomplished at a time when schools were allowed to teach simultaneously in a face-to-face and online manner.

3.2. Instrumentation

There were two instruments for this study, CPT and Vocabulary Pre-test, and Post-test.

3.2.1. Cambridge Placement Test (CPT). A Cambridge Placement Test (CPT) of the children's version was run on a group of 75 female intermediate EFL students to homogenize the members according to their proficiency level. CPT is a 25-question online English test. The researchers administered this test to nine-grade students at a high school in Neyshabur. Those members who have located one standard deviation above and below the mean were chosen to take part in this research. Then according to their scores on the CPT, 60 EFL learners were selected for this study. The reliability index of CPT was assessed by Kuder-Richarson formula 21 as 0.87.

3.2.2. Vocabulary Pre-test and Post-test. To measure the vocabulary learning of the EFL learners and the effectiveness of the treatments of the study (i.e., Shaad as online learning

versus face-to-face teaching as a medium of instruction), the vocabulary researcher-made test consisting of 49 multiple choice items was employed as a post-test and pre-test. This pre-and post-test was designed based on Prospect 3, which is in line with the content of the high school book taught during the research. The content validity of the tests was determined by experts in the field of EFL teaching. However, to check the reliability of the tests, the researchers piloted the tests before the main administration at two female high schools in Mashhad based on convenience sampling. After piloting the tests on 40 ninth-grade high school students different from the participants of this research, the tests' reliability was estimated by KR- 21 formula.

Table 1
Reliability of the Pre and Post-test

Instruments	Number of students	Number of items	R
Pre and Post-test	40	49	0.780

As displayed in Table 1, the pre and post-test showed a reliability of 0.78. The pre and post-test indicated an acceptable index of reliability (Kline, 2000). Thus, this test is regarded as a reliable and valid test.

3.3. Materials

Vocabulary sections of the ninth-grade English textbook were considered as the teaching materials in this study. Public school students in the ninth-grade study a book called Prospect 3, which is distributed and published by the Education Ministry. In this textbook, in contrast to the textbooks Prospect 1 and 2, the vocabulary is presented in the form of phrases and sentences. In addition, the extra words that are introduced in the photo dictionary part at the end of the book are very useful and applicable for students. Lessons one, two, and three include 20 new words, 56, and 54 new words and phrases, respectively. In this research, the EFL students received the new words from three lessons. Table 2 summarizes the first three lessons of Prospect 3.

In Shaad online classes, all the words in Table 2 were presented to students in the form of voice, along with some extra explanation regarding their meaning, pronunciation, and applicability in real life. After the presentation, the learners were requested to hear voices; afterward, they duplicated the words, wrote them in their English notebooks and read aloud, and sent their voices to Shaad's online English class. When participants sent voiced and written assignments, the researchers checked students' tasks and examined their writing. Then the researchers provided feedback on the correct spelling of words and phrases, pronunciation, and exact application of vocabulary in sentences when teaching new words. At this time, the Shaad treatment group underwent teaching vocabulary on Shaad, while the control group obtained a different type of treatment for vocabulary learning through face-to-face teaching. The students in the control group were instructed precisely the words of the first three lessons of Prospect 3 in a face-to-face manner with the same procedure performed with the experimental group. The

only difference between groups is the medium of instruction as the Shaad platform or face-to-face teaching.

Table 2
Summary of the Prospect 3 Lessons

Unit No.	Theme and Function	New Vocabularies
Lesson 1	Personality	shy, angry, brave, clever, kind, helpful, hard-working, serious, talkative, careless, cruel, funny, neat, nervous, quiet, rude, selfish, lazy, generous, and polite
Lesson 2	Travel	buy a ticket, reservation, book a hotel, map, airport, check the passport, guide book, check-in, check the timetable, take off, exchange money, fill out a form, pack for a trip, talk to a receptionist, weigh the baggage, baggage reclaims, board the plane, make a voyage, take an express train, and pay toll
Lesson 3	Festivals and Ceremonies	fireworks, New Year, holidays, bake a cake, buy goldfish, hold a ceremony, set the table, make lunch/dinner, sing the national anthem, hold a ceremony clear the table, watch fireworks, read poems of Hafez, wear special clothes, celebrate a religious holiday, watch the military parade, commemorate NE martyrs, Islamic-Iranian culture, Islamic revolution anniversary, and go out on Nature Day

3.4. Procedure

As the primary step within the present research, the researchers piloted the tests on 20 EFL students different from the members of this study before the main administration. The second step was the selection of the participants based on the CPT. The data were analyzed, then sixty learners were selected for the objective of this investigation. Next, they were assigned to experimental and control groups with 30 ninth-grade high school students in each group. Participants in both experimental and control groups were administered a pre-test. After selecting the students, the third step in this investigation was to administer the treatment. To study the impact of applying Shaad on vocabulary learning, the researchers taught the teaching materials through the use of the Shaad platform. Based on the lesson plan and the ninth-grade vocabulary of Prospect 3, the members of the Shaad group were taught the vocabulary. They were sent a file of vocabulary extracted from the textbook applying the Shaad platform one time a week following every session. Furthermore, the students in the experimental group received pictures and animations related to the new vocabulary. The EFL students in the Shaad group were requested to recognize the meaning of the vocabulary by applying the Online Dictionary applications, practice the vocabulary in context, then create and transfer those sentences back to their classmates and the teacher for revision. It should be noted that the teaching materials and the teacher's teaching method were the same for both Shaad and face-to-face instruction groups. However, the experimental group received the teaching material through the Shaad platform, while the control group learners experienced the instruction in a face-to-face manner for twelve weeks. Vocabulary was taught by utilizing real objects for concrete nouns in the classroom to help the students to learn the words by visualization; Besides, some pictures were drawn on the whiteboard. These pictures were in the form of

flashcards, stickers, wall charts, posters, newspaper pictures, and drawings made by the teacher. In addition, other techniques such as using gestures, mime, enumeration, contrasting, guessing from the context, spelling of English word forms, and explicit or natural drilling to make the students familiar with the forms of the words were employed.

The last step in this research was to evaluate the students' vocabulary learning after the twelve treatment sessions for three months in control and experimental groups. Accordingly, the post-test was administered to the Shaad and face-to-face groups to compare the test scores of the Shad platform with the control group's scores in the post-test. Diamoz online test smart software was used by the researchers to manage the online test session. To respond to the study's questions, version 24 of the Statistical Package for Social Sciences (SPSS) was employed. To examine the raw data and answer the study's questions, a sequence of independent samples t-tests was applied as inferential statistics.

3.5. Research Design

The current investigation applied a quasi-experimental design; it involves one experimental group and a control one. This investigation sought to examine the comparative effectiveness of the Shaad platform as online learning versus face-to-face teaching (i.e., independent variables) on the EFL students' vocabulary learning (i.e., dependent variable) via administering the pre and post-test during the Covid-19 pandemic. Hence, it was quasi-experimental research because a non-randomized experimental design was applied. Even though the independent variable is manipulated, members are not randomly assigned to situations or orders of situations (Cook & Campbell, 1979). Consequently, the researchers used a pretest-posttest control group design in which the dependent variable is measured previously before the treatment is performed and once following it is implemented.

4. Results and Discussion

4.1. Results

To check the data normality, the Shapiro-Wilk test and Kolmogorov-Smirnov test were used. In this test, if the significance level (sig) is extra than the alpha value of 0.05, the data normality is taken into consideration as normal. According to the results shown in Table 3, the significance level (sig) of the pre and post-test scores of the groups was greater than the alpha value 0.05 ($p > 0.05$). Therefore, it is concluded that the test scores had normal distributions.

Table 3
Normality Test

Groups	Tests	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	P	Statistic	df	P
Experimental (Shaad)	Pre-test	0.18	30	0.15	0.92	29	0.17
	Post-test	0.82	30	0.09	0.93	29	0.08
Control (face-to-face instruction)	Pre-test	0.92	30	0.8	0.92	29	0.10
	Post-test	0.92	30	0.08	0.96	29	0.59

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4.1.1. The Pre-test. In this section, descriptive statistics of the pre-test, including the Standard Deviation, Mean, and Std. Error Mean (SEM) is displayed in Table 4.

Table 4
Descriptive Statistics for the Pre-test

Groups	N	Mean	Std. Deviation	Std. Error Mean
Face-to-face instruction	30	16.32	2.31	0.63
Shaad	30	17.93	2.88	0.69

To discover whether these difference between the performances of the two groups at the pre-test stage was statistically meaningful or not, one independent samples t-test became carried out, the findings of which are presented in the following table.

Table 5
Independent Samples T-test for the Pre-test

	Levene's Test for Equality of Variances		T-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	MD	SED	95% Confidence Interval of the Difference	
Shaad vs. face-to-face								Lower	Upper
Equal variances assumed	6.21	0.043	1.72	59	0.47	0.67	0.70	0.29	2.35
Equal variances not assumed			1.72	48.20	0.47	0.67	0.70	0.29	2.35

A T-test was administered for the control and experimental groups before the treatment to determine the homogeneity of the two groups. An independent t-test was executed to compare the means of the control and experimental groups on the vocabulary pre-test. Levene's test of homogeneity of variances F = 6.21 had a probability of 0.043. The probability connected with Levene's F was higher than the significance level (0.05). That was the reason for the row of Equal variances assumed was described. As Table 5 shows, since the t-observed value (1.72) with df=59 was lower than the critical t-value (1.96), the difference between the two pre-test means was not significant at the pre-test stage ($p<0.05$). Moreover, the T-test for equality of means showed that the significance value was 0.47, which is $p > 0.05$. This implies that there was no significant difference between the groups at the start of treatment. Thus, the groups were homogenous at the outset of the present study. It must be mentioned that the groups were homogenous in representations of their variances on the pre-test.

4.1.2. The Post-test. The obtained scores from the post-test are given in Table 6 to discover any significant difference between the groups. The post-test descriptive statistics are shown in Table 6.

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Table 6
Descriptive Statistics for the Post-test

Groups	N	Mean	Std. Deviation	Std. Error Mean
Face-to-face instruction	30	28.03	2.33	0.45
Shaad	30	21.11	2.25	0.39

After twelve sessions of treatment, the mean scores for the experimental group and control group were 21.11 and 28.03, respectively. Table 6 displayed that the mean of the face-to-face instruction group in the post-test was greater than the Shaad group's mean. Furthermore, the descriptive statistics showed that the received standard deviations for the control and experimental groups were 2.33 and, 2.25 respectively. Totally, according to the findings demonstrated in Tables 5 and 6, the mean score of the face-to-face instruction group had considerable growth in the post-test in comparison with the pre-test stage. Regarding discovering whether the distinction between the performances of the experimental and control groups in the post-test was statistically significant or not, another independent samples t-test was operated.

Table 7
Independent Samples T-test for the Post-test

Shaad vs. face-to-face	Levene's Test for Equality of Variances		T-test for Equality of Means						
	F	Sig.	T	Df	Sig. (2-tailed)	MD	SED	95% Confidence Interval of the Difference	
								Lower	Upper
Equal variances assumed	0.71	0.82	6.97	59	0.00	2.42	0.77	2.00	4.21
Equal variances not assumed			6.97	55.09	0.00	2.42	0.77	2.00	4.21

Table 7 indicated that the t-observed value (6.97) with df=59 in the post-test was greater than the critical t-value (1.96). Thus, the difference between the groups was significant at the post-test stage ($p<0.05$). The results revealed that the face-to-face instruction group accomplished superior within the post-test compared to the pre-test stage. Thus, face-to-face teaching had a statistically significant impact on EFL learners' vocabulary learning.

One of the vital parts of foreign language learning is to learn its vocabulary because the definitions of new vocabulary are extremely underscored. It is additionally fundamental to language instruction and is of supreme value to a language. This investigation was considered to be among the few attempts to fill the gap of inquiring about the comparative effect of using the Shaad platform as online learning versus face-to-face teaching on EFL students' vocabulary learning. The outcomes of the investigation showed that teaching vocabulary through the Shaad platform did not have a statistically significant impact on EFL learners' vocabulary learning. While face-to-face instruction did have a statistically significant impact on the student's vocabulary learning. In fact, there was no study regarding the use of Shaad in learning

vocabulary; thus, the conclusions of the study were compared with the results of the investigations on MALL and vocabulary learning. The outcomes of the present analysis differed from the consequences of Makalesi (2018), who indicated that learners described the MAVL application as practical, and beneficial. The conclusions also revealed that members discovered the video and graphic explanations extra beneficial, and their opinions varied counting; on their learning styles. This research extremely recommended the employment of MALL-based instruments for vocabulary acquisition because of their value inside and outside the school.

Dissimilar to the outcomes of the present inquiry, the outcomes of Shokrpour et al. (2019) confirmed that there was a meaningful relationship between Iranian EFL students' vocabulary learning and CALL instruction. At last, Bayraktar (2001) administered a study on the use of computer-aided instruction (CAI) on learners' performance compared to conventional face-to-face teaching. Outcomes explained a little positive influence on CAI application; while employed in simulation or tutorial practices, also utilized as a supplement to conventional face-to-face teaching. Possible reasons for the results of this study may be due to technical glitches that Shaad had compared to other messengers. For example, most files that were large could not be sent in Shaad or must send many times. Some images would not be sent due to the low speed, and you must activate the resend for the unsent pictures; otherwise, the unsent file will not be sent automatically. When multiple people in the class typed at the same time, causing the Shaad crashed, and students with older mobile models did not see the messages. Also, there are some influential factors such as teachers' experience and students' attitudes toward e-learning. The above factors have caused dissatisfaction among teachers and students in Shaad use. However, Ministry of Education officials have added changes to the Shaad update, such as adding live calls or video tutorials.

5. Conclusion

Given the outbreak of COVID-19 and the closure of educational centers in 2020 and the spread of virtual education, there is a need to create a new and practical look at the education process. Language learning with the assistance of mobile phones is considered a new educational technology. Recently, due to the spread of various technologies, mobile phones became popular among students to reinforce learning. Shaad is a new development in education in Iran. However, considering the results of this study, the Shaad has not been able to achieve more success compared to face-to-face training, and unlike other platforms, the rate of learning vocabulary is significantly different from face-to-face instruction.

Based on the data analysis, Shaad as online learning did not have a statistically significant influence on EFL students' vocabulary learning. On the other hand, face-to-face instruction did have a statistically significant impact on EFL students' vocabulary learning. Also, the face-to-face group outperformed in learning EFL vocabulary. It leads to changes in learning methods so that students can grow with the advancement of technology and lifestyle change in the world. Although, in this study, the medium of instruction, Shaad as a platform for online learning, had some limitations, which led to little learning rather than face-to-face teaching.

The prominent status of MALL in the previous studies is proven; the use of Shaad is a kind of exception due to the lack of infrastructure in the Iranian public school context. Although this platform can open a new window on education in the country, this issue should not be neglected the expansion of e-learning and entry into this field may have always been raised by educational experts and has always been marginalized with the argument that it needs the necessary infrastructure and facilities, but the COVID-19 that came opened the way for many things to jump, including that the Shaad platform entered the educational system in Iranian educational system.

This study offered some implications for policymakers, school administrators, and language teachers. The study conclusions offer the subsequent implication for EFL students and instructors negotiating with language teaching and learning. Language studies in the domain of using mobile applications are well-advised to apprehend the implications of this research into a reflective account. According to the conclusions of this research, by removing the deficiencies of mobile learning (i.e., Shaad), it is recommended that EFL students may apply Shaad to develop their foreign language learning, especially vocabulary learning. The field of teaching vocabulary is extremely essential, especially in the existing position of the necessity of English in Iran, where English is trained as an EFL; consequently, a shift from face-to-face instruction techniques to novel ones should be well investigated to reach better conditions for vocabulary learning. A future key concern of policymakers might be to provide infrastructure for virtual education to contribute to the improvement of EFL learning so that it will be useful along with face-to-face education after the Covid-19 pandemic.

Due to the restrictions of the present research, this investigation was conducted with a restricted number of students. Future research may consider a larger number of students. In addition, the present investigation was administered to Iranian intermediate EFL students; hence its conclusions could not be generalized to whole language students at various levels in diverse instructive settings. Consequently, future studies may concentrate on students with various levels. Finally, future researchers require to consume a more extended time than the time used in this investigation.

There were some future directions related to this study. The present research merely concentrated on vocabulary learning. Hence, future researchers could examine the impact of applying Shaad on developing other sub-skills, such as grammar and pronunciation. Moreover, this research concentrated on female EFL students in a public high school. The researchers preferred the EFL students since they were more available to form connections. Consequently, future researchers could analyze the impact of applying mobile phones on enhancing vocabulary learning with other participants and different statistical populations in various educational contexts.

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