Research Paper

Effect of Virtual Vs. Blended Language Instruction on the Development of Receptive Skills and Motivation by Iranian Intermediate EFL Learners

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Abstract
Following the Covid-19 pandemic outbreak during 2020 and 2021, there has been a significant shift towards technology-based education. This study has investigated the comparative effectiveness of various online instructional methods in comparison to traditional teaching styles. Specifically, it has assessed the impact of virtual and blended learning on the motivation and development of L2 receptive skills among intermediate EFL learners in Iran. The research involved the creation of pre-tests and post-tests based on Touch Stone Book 3 for listening and reading skills. These tests consisted of multiple-choice questions after reading passages and listening to audio materials. A total of 60 intermediate EFL learners were selected and divided into three groups: virtual instruction, blended instruction, and traditional face-to-face instruction. The findings of the study, analyzed using SPSS software, indicate that both virtual and blended instructional methods led to improved reading and listening performance. However, the blended learning group outperformed the other two groups, with a more significant impact on reading skills. Additionally, the blended group showed higher motivation levels in post-tests. Overall, this study suggests that a balanced integration of technology into education, as demonstrated by the blended approach, can yield positive outcomes in terms of both motivation and receptive language skill development. These findings offer insights for educators looking to leverage technology alongside traditional teaching methods.

INTRODUCTION

As technology goes through advancement paths, many social environments are influenced by technologies that can facilitate interaction (Yudhana, 2021). Widespread ownership of smart phones and other portable and wireless devices has changed the landscape of technology-supported language learning. Moreover, nowadays, social networks are considered to be one of the outcomes of the improvement of technology (Hamilton, 2018). They are computer-mediated tools that allow people to create, share, or exchange information, ideas, and pictures/videos with other friends or relatives (Jiang, et al., 2021). There are a large number of teaching and learning techniques and programs designed in order to improve EFL learners' language competence (Nowbakht & Fazilatfar, 2019). These technologies can be in line with strategic educational goals such as increasing students' retention and achievement, providing learning needs, and helping learners who do not have the opportunity to participate in education (Wen, 2022). In addition, the outbreak of the Covid-19 Virus resulted in significant changes in different aspects of the lives of people all around the

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world. Education and teaching are also affected by these changes. Teachers and students have to go through net-based audio-visual aids in order to compensate for the lack of face-to-face interactions used in the traditional classes in order to provide and receive the intended educational items. Therefore, these technological devices, which can provide some audio-visual support, can be used as new techniques in order to facilitate the second language learning process.

As technological and communicational means improve, the need for interacting with others from different cultures and languages becomes more vital. The provision of several lingua francas made the interaction easier in such a kind of world. Among the introduced languages English is considered to be the international language being taught and learned in many countries (Yang, 2013). English, like any other language, is composed of two receptive and two productive skills. Listening and reading skills can be included in the receptive category while speaking and writing skills are in the productive category (Yudhana, 2021). The students receive the information through their receptive skills and process it but no production is involved. However, the production of the language needs receptive skills (Harmer, 2007). Therefore, it seems that both listening and reading skills are the building blocks for the acquisition of both first and second languages. Through these two skills, the required data and input are provided to the learners making them able to produce an effective and reasonable output in spoken or written forms. The literature on the instruction and acquisition of language skills suggests different techniques to help EFL students improve (Hamouda, 2013; Jiang, et al., 2021; Sugiono, 2008). However, there are few studies on technology-based methods of instruction in order to reinforce listening and reading comprehension development (Wen, 2022). In fact, the main emphasis is on productive skills. Due to the limited amount of research into the effects of technology and networks on receptive skills, and the focus of teachers and syllabus designers on only a few old methods and materials of training (grammar-translation and audio-lingual methods), the results of this study may contribute to the literature by suggesting a new solution to develop listening skill. Moreover, social networks, as the most widespread communicational tools, can play a significant role in this area (Jiang, et al., 2021). However, mostly, the application of computers, mobiles, and as a whole, technology and social networks are banned in educational classes in Iran. Even, they are considered ineffective time-passing and entertainment tools that cannot be effective in learning any educational point. This content is conveyed through various aspects of society by filtering the applications, condemning their overuse, and forceful limiting of them by parents (Nowbakht & Fazilatfar, 2019). Therefore, most language learning researchers prefer to ignore these challenging areas. In addition to all the previous gaps, Iran and most other Asian countries (the countries in which English is considered to be the foreign language) have always been suffering from a lack of detailed exploration of new and updated language learning methods. As a result, they would end up with deficient and imitative teaching styles. Finally, in cases where researchers have worked on technology induction in the educational context, the focus was merely on virtual classes and blended were rarely taken into account.

LITERATURE REVIEW
Theoretical Background

As mentioned previously, the application of the World Wide Web can be considered one of the most prominent and vital components of interaction in any aspect of life (Wen, 2022). This technological development has turned out to be an inseparable part of people in the twenty-first century. Moreover, technological advancements have provided people with portable online devices that can facilitate the process of teaching and learning (Puji Permana Aji, 2017). The use of computers, cell phones, as well as other portable devices has resulted in the introduction of new concepts in education such as WALL, CALL, and MALL representing Web-Assisted Language Learning, Computer-Assisted Language Learning, and Mobile-Assisted Language Learning (Taleb & Sohrabi, 2012). These new trends in education can take place in

any location, at any time, including traditional learning environments such as classrooms as well as in workplaces, at home, in community locations, and in transit (Nowbakht & Fazilatfar, 2019). The extent to which the class is controlled by these technological tools and applications can lead to the administration of merely virtual or blended courses.

Language is composed of receptive and productive skills. The learners receive the input through receptive skills and process it to have an effective production. There is a complex relationship between these two categories of skills. The easiest explanation is that receptive skills are the prerequisites for productive ones (Ellis, 2008). In other words, the information is received and processed through listening and reading, consequently, the language is produced through speaking or writing. Yet, the first natural skill humans develop from an early age for communication needs is listening (Wen, 2022). Any newborn child is equipped with a sense of reception of sounds, signals, and other sources of interaction. The ear is the organ that perceives the sounds of the language, be it the mother tongue or, later on, a second or foreign language. Situations differ and many factors may determine the reception of the message (Berrabah, 2014). Listening is an interactive complex process where the learners interpret with what they know and what they are hearing. From schematic point of view, it involves the connection between the background knowledge and the knowledge currently they are acquiring. The role of listening skill is to make a connection with the learning process. In this respect, Vandergrift (2002) asserted that "listening skill is an interactive interpretive process where listeners use both prior knowledge and linguistic knowledge in understanding message" (p.2). The degree to which listeners use the one process or the other will depend on their knowledge of the language, familiarity with the topic or the purpose for listening. Listeners' role is not just to hear.

According to Krashen (1985) and Hamouda (2013), listening skill is an important element in obtaining understandable input. Learning will not occur if there is not any input. Listening comprehension provides the appropriate situations for the acquisition and expansion of other language skills. Rost (2002) expressed that the development of listening is related to the attainment of proficiency in speaking. He continued that listening is the most important skill in language learning because it is the most widely used language skill in normal daily life. Learners should attentively listen to the speaker and have a background about the subject that can make the input more comprehensible for the listener. Listening gets even more challenging when it comes to second language learning and needs a great deal of hard work and practice (Woolfolk et al., 2008). Listening failure may be encountered as a result of a lack of attention and preparation. Poor listening comprehension ability leads to significant challenges for learners in any field of study. Low scores in tests, wrong and problematic assignments, and the loss of good job opportunities are among these challenges. Grant (1987) pointed out that there are two main reasons for considering listening as an important skill in the process of second language learning. First of all, poor listening ability can lead to the breakdown of communication. Second, listening is important because it helps students learn the language more easily (Savic, 2013). For example, after hearing words, students can pronounce the words, as well as sentences, or even intonation patterns. Students must hear the language before they can produce it, successfully.

Reading is considered to be the other receptive skill. It is an active cognitive process concerned with reasoning and construction of meaning from a written text and understanding its content and components efficiently and completely (Wen, 2022). If the EFL learners are expected to understand the written text deeply and adequately, there is a great need to teach them the reading comprehension skills that comprise reading proficiency (Abdelhalim, 2017). In fact, reading is the most important skill, not only as a source of information and pleasurable activity but also as a means of consolidating and extending the individual's knowledge of the language (Rivers, 1981). Brown (2001) confirmed that "reading is as much an emotional as a cognitive process so that the affective factors strongly impact all

phases of the writing process" (p.300). In fact, reading is a combination of cognitive and affective processes and to optimize learning, equal attention should be given to the two sides; cognitive and affective. As Swalander and Taube (2007) maintained, "good reading ability is the key to success in educational settings and this is why researchers try to find effective educational and psychological variables that can explain variations in reading ability and academic achievement" (p. 207). Hedgcock and Ferris (2009) asserted that reading is a complex construct that involves the interaction of several psycholinguistic processes.

Moreover, it is important to work on the motivation of the EFL learners, since it can act as a facilitator to learn a new language (Alizadeh, 2016). When someone is motivated, he can be successful during the challenging process of second language learning (Ditual, 2012). Dörnyei (1998) claimed that motivation is a key to learning. It is an inner source, desire, emotion, reason, need, or purpose that moves a person to a particular action. Motivation has been regarded as one of the main factors that influence the speed and amount of success of foreign language learners. These claims have been supported by numerous qualitative and quantitative research studies conducted on different aspects of human learning (Chang, 2010; Lacus, 2010; Moiinvaziri, 2009). According to Pourhosein Gilakjani and Saburi (2016), the success of any action is dependent on the extent to which people try to get their goal, along with their desire to do so. They believed that people generally refer to this psychological factor as motivation. It is a motive force that arouses, incites, or stimulates action. Motivation is an important factor in specifying the readiness of learners to learn a new issue. Therefore, it seems to be a good point to work on the effect of each kind of instruction on the motivation of the learners to acquire different skills. As a result of the significance of all these issues, it is worth working on the effect of virtual and blended methods of instruction on the listening and reading skills of EFL learners and taking into account the impact of each type of instruction on their motivation to learn the target language.

Empirical Background

Numerous studies have been conducted on the application of technology in language learning classes. Some of the related research works are reviewed in this section. Puji Permana Aji (2017), in his qualitative study, worked on the implementation of the blended mode of instruction in order to develop the listening comprehension of the EFL learners. Twenty-eight male and female students were selected to participate in the study. The intended data were gathered using interviews, observation, and questionnaires. The obtained findings revealed that blended instruction could improve the listening comprehension of the students. Hamilton (2018) carried out a review to investigate the effect of using a blended learning environment within a second language setting. Twenty-eight peer-reviewed journal articles were analyzed. The findings revealed that blended environments seemed to add novelty and increase motivation and engagement of students in these settings. However, the pedagogical implementation of active learning such as collaboration, providing feedback, and using activities that had a communicative purpose seems to yield the best results. Learner perceptions were more or less positive with a few exceptions. Outcomes seemed to exceed or equal those produced in a traditional educational setting.

Rahmawati (2019), in another study, investigated the students' preference regarding blended and face-to-face modes of instruction in listening and speaking courses at a university in Yogyakarta. The researcher used an interview and observation of the online learning course website to gather the intended data. The results obtained from the interview and the course selection website indicated that the blended instruction mode was preferred by the EFL learners. Moreover, the learners believed that blending face-to-face instruction with online meetings could result in the higher development of listening and speaking skills. In another quantitative study in this area, Syamsuddin and Jimi (2019) explored the effect of blended instruction on EFL learners' listening comprehension and motivation. Twenty-three EFL learners studying at the University of Saweri-gading Makassar were selected to participate in

the study. Applying Classroom Action research through planning, implementation, observation, and reflection, the researchers collected the intended data. The obtained results showed that listening comprehension could improve through the blended mode of instruction. Moreover, learners' learning motivation could increase through Blended Learning.

Alipour (2020) carried out a research work to compare the vocabulary improvement of Iranian EFL learners participating in online and blended classes. In order to achieve the objectives of the study, 90 intermediate language learners were chosen and divided into two experimental and one control groups. The students participating in the control group were proposed to traditional face-to-face methods of instruction. However, the ones participating in the experimental groups got the intended content through online and blended methods of language instruction. The mentioned study was conducted through the pre-test/post-test design. The results showed that the EFL learners participating in the blended-method group and online group outperformed the students in the control group. Moreover, no significant difference was observed between the scores obtained by online and blended participants.

Jiang, et al., (2021) concentrated on the impact of the implementation of online and blended learning using Quizlet software on the achievement of Chinese EFL learners. This mixed-method study lasted for about four months. Forty-two students were placed in the experimental group and fifty-three participated in the control group. The data was collected through the administration of English listening tests and follow-up in-depth interviews. The statistical and qualitative findings demonstrated the outperformance of the blended group in the listening test. In addition, the attitudes and interests shifted from a negative feeling toward language learning to a positive one.

In a comprehensive and outstanding study on the effect of blended instruction on the reading comprehension of elementary EFL learners, Rombot (2021) worked on twenty-five fifth-grade students studying in international schools. The statistical results reported the development of reading comprehension scores

of the participants. The researcher concluded that through blended instruction, the learners reviewed the materials before being presented in the class; therefore, they could acquire the knowledge of reading according to their pace and abilities. In the same vein, Yudhana (2021) carried out a study to identify the potential effect of the blended mode of instruction on the reading comprehension of EFL learners. The subjects were sixty Thai undergraduate students participating in experimental and control groups. Reading comprehension pre-test and post-test were utilized as the data collection instrument. The results suggested a statistically significant positive difference between the post-test scores of the participants in experimental group considering the reading comprehension test.

Purpose of the Study

As observed in the reviewed literature, the number of studies working on both receptive skills is rare. Moreover, some of the studies did not have any control group, in other ones, the concept of blended instruction was not fully elaborated, and some other research works had not included motivation as a determining factor. Due to all these gaps in the literature, the present study was carried out in order to compare the effect of virtual, blended, and traditional language instruction on the motivation and acquisition of listening and reading skills by Iranian intermediate EFL learners. In order to achieve this objective, the following research questions were raised:

RQ1. Do virtual and blended methods used to teach the reading and listening skills vary in their effect on the performance of Iranian intermediate EFL learners?

RQ2. Do virtual and blended methods used to teach the reading and listening skills vary in their effect on the motivation of Iranian intermediate EFL learners?

METHOD
Design and Participants
This study enjoys a quantitative method with a pretest posttest quasi-experimental research design. The participants of the study were 60

Iranian EFL learners chosen from among 120 Oxford Quick Placement Test (OQPT) takers who scored between 25 to 45 out of 100. They were all attending English classes at two language institutes (Pegah and Aryan) in Kerman, Iran. Since this study aimed at exploring the role of virtual, blended, and traditional instructional styles in learners' acquisition of listening and reading skills, the selected participants were randomized into two experimental groups and one control group (20 participants in each group). It is also worth noting that the selected participants were males and females between the ages of 6 and 22. Additionally, they were asked about their linguistic backgrounds, such as L1, previous knowledge of English, and residency in an English-speaking country and the analyses demonstrated the homogeneity of the participants.

Instruments and Materials
The research instruments employed to collect the data for this study were a motivation questionnaire, two English reading comprehension tests (pre-test and post-test), and two English listening comprehension tests (pre-test and post-test).

Listening and Reading Pre- and post-tests
Students in each of the three groups were required to complete a series of assessments at the commencement and conclusion of the semester to gauge their performance and progress. These assessments were designed to evaluate the participants' abilities in reading and listening comprehension. The tests were collaboratively created by the researcher and colleagues affiliated with the specified institutes.

Reading pre- and post-tests, derived from the assessments provided by the authors of Touch Stone Book 3 (McCarthy, et al., 2006), were composed of four reading comprehension texts. Each text was followed by five multiple-choice items, and the participants were supposed to choose the best option. The reading texts in the pre-test dealt with "Arabic as a historical lingua franca", "tourism", "the history of Shiraz", and "English as a foreign language". The tasks in the post-test were on the subjects such as "homeschooling of children", "human beings as

social creatures", "the International Committee of the Red Cross", and "the friendship between a boy and a dog". I order to approve the homogeneity of the two tests, the difficulty level of both tests was checked using the difficulty level formula proposed by Farhady, et al. (1994). The difficulty level of reading pre-test and post-test were 50%, and 48%, respectively. In order to check the reliability of the tests, Cronbach's alpha analysis was run and the numerical results were $\alpha = 0.749$, $\alpha = 0.806$ for the reading pre-test and post-test.

Considering validity, all listening and reading comprehension tests were derived from the original assessment copies of Touch Stone Book, and the validity of the items has been checked by the authors. However, in order to increase the value of the assessment tools, a pilot study was conducted to find the probable problems of the tests and the scoring rubric. Ten intermediate students from the same institutes participated in all these pilot studies. In order to validate the researcher-made tests two language teaching experts were asked to check for the relevance as well as appropriateness of the items. Necessary revisions based on the experts' ideas were made so that the tests were accepted valid enough.

Motivation Questionnaire
A motivation questionnaire was adapted from the comprehensive Attitude and Motivation Test Battery (AMTB) developed by Gardener (1985). The original copy of the questionnaire was composed of 104 items. However, in order to sum up the items and avoid the boredom of the participants, the researcher took into account six out of twelve motivation criteria proposed by Chalak & Kassaian (2010) and selected the items related to the intended criteria. These criteria are presented in the following 12 categories:1. Interest in Foreign languages 2. Parental Encouragement 3. Motivational intensity 4. English class anxiety 5. English teacher evaluation 6. Attitudes towards learning English 7. Attitudes towards English-speaking people 8. Integrative orientation 9. Desire to learn English 10. English course evaluation 11. English use anxiety 12. Instrumental Orientation. However, based on the six chosen criteria, the ultimate

questionnaire was composed of 32 items measuring students' motivation for language learning. It should be noted that the original questionnaire was adapted based on the needs of the study and the final format of the AMTB included two parts: part 1 on personal demographic information and part 2 on 6 subscales which were randomly ordered. Five items were related to interest in foreign languages, five to attitudes towards learning English, seven to integrative orientation, five to desire to learn English, seven to instrumental orientation, and three to teacher evaluation. For eliciting participants' views on each item, a 5-point Likert scale was adopted for the participants' answers. They had to respond to each item choosing one option from strongly *agree to strongly disagree (1= strongly disagree, 2= agree*, 3= neutral, 4= *disagree*, and 5= *strongly disagree).* The internal consistency of the items was checked using Cronbach's alpha formula ($\alpha = 0.931$), and the validity was approved by the instructors and colleagues working in this area.

Instructional Materials

In addition to the testing instruments, the students were supposed to use a kind of electronic device (mostly their cell-phones) which could be connected to the online social network What's App in order to participate in the online classes and play the listening audios and read the reading materials. The teacher prepared 20 listening audios and 20 reading texts for the students during the treatment. These reading and listening tasks were the ones available in the textbook. The ones participating in online and blended-method groups received these materials through online sources. On the other hand, the ones participating in face-to-face classes were exposed to the intended materials in the class. It is worth mentioning that the educational material was taken from the Touchstone series (Touchstone 3) from Cambridge University Press. Touchstone has an online version as well as a print version. Both paper and online versions are equal in content and objectives. The online version includes a strong instructional component to provide the students with an experience very similar to having a teacher explaining concepts in front of them. Additionally,

it has plenty of activities (workbook, video activities, reviews, and games). Moreover, each unit has four lessons in order to develop four major skills.

As far as language teaching phase of data collection is concerned, the students were supposed to use an electronic device (mostly their cell-phones) which could be connected to the WhatsApp -the online social network- in order to participate in the online classes and play the listening audios and read the reading materials. Twenty listening audios and 20 reading texts were prepared to the students during the treatment. These reading and listening tasks were the ones available in the text book. The students participating in online and blended-method groups received these materials through the online sources. The ones participating in face-to-face classes, however, were exposed to the intended materials in their classroom. The educational materials were taken from the Touchstone series (Touchstone 3) published by Cambridge University Press. Touchstone has an online version as well as a print version. Both paper and online versions are equal in content and objectives. The online version includes a strong instructional component to provide the students with an experience very similar to having a teacher explaining concepts in front of them. Additionally, it has plenty of activities (workbook, video activities, reviews and games). Moreover, each unit has four lessons in order to develop the four major skills.

Data Collection Procedure

The data collection procedure was conducted at Pegah and Aryan language institutes in Kerman, following the course timetable provided by these educational centers. Prior to commencing the treatment, the researcher thoroughly explained all aspects of the tests to the principals and involved instructors, addressing any questions or concerns they raised. Once all ambiguities were clarified, the treatment phase commenced.

Pre-treatment Administration

Before implementing the treatment, the researcher designed and developed two listening and two reading tests as pretests and posttests. These assessments were constructed based on

the course content to be covered. It's important to note that the listening and reading tasks within the tests were adapted from existing versions developed and approved by the publishers of Touch Stone Book 3 (McCarthy et al., 2006). Pilot testing was conducted to ensure test difficulty and identify any flaws. After necessary revisions, each test consisted of four tasks with the least misunderstanding, vagueness, and specificity. Pearson product-moment correlation analysis confirmed a significant correlation between the students' scores on the listening pretests ($r = 0.845$, $p = 0.0001$) and reading pretests ($r = 0.691$, $p = 0.0001$), validating the similar difficulty levels of the tests for each skill. Additionally, a motivation questionnaire was derived from the Attitude and Motivation Test Battery (AMTB) developed by Gardener (1985), focusing on six motivational factors to ensure participant engagement. The questionnaire comprised personal demographic information and 6 subscales with items rated on a 5-point Likert scale.

Treatment Administration

In the traditional face-to-face classes (control group), students received 40 hours of instruction over ten weeks, including four hours allocated for mid-term and final exams. Instruction involved lectures, group work, timed individual activities, workshops, contests, games, presentations, and discussions. Listening tasks required students to listen to audio twice consecutively, followed by answering questions. Reading tasks were presented along with the corresponding questions, with no time restrictions. Students in the virtual group engaged in the same number of hours through a learning management system provided by the course material. Virtual units included instructional content, workbooks, video activities, interactive games, unit tests, and discussion forums. Students were encouraged to actively participate in the discussion forum, interacting with peers and following teacher guidance. Blended-method students participated in 32 hours of online instruction, with four face-to-face sessions interspersed. Virtual sessions mirrored the virtual group's format, while face-to-face sessions involved reviews, discussions, and further explanations.

Post-Treatment Administration

One week after the last instructional session, all three groups underwent listening and reading post-tests, designed to match the pre-test difficulty level. Simultaneously, participants completed the motivation questionnaire. Efforts were made to maintain consistency across groups in terms of assessment context, scheduling assessments in the afternoon between 17:00 and 20:00. The reading and listening tests were time-limited to one hour, while the motivation questionnaire was designed to take less than half an hour to complete. Following test administration, collected papers were scored, and raw data was provided to the analyst for subsequent statistical analyses.

Data Analysis Procedure

In order to conduct the required statistical analyses and interpreting the obtained data, the Statistical Package for Social Sciences (SPSS 25) software was used in "Data Analysis" phase of the study. For the purpose of comparing the post-test results and answer the first research question, concerning the effectiveness of virtual and blended methods of teaching on the reading and listening skills of Iranian intermediate EFL learners, MANOVA was used. In addition, in order to answer the second research question and measure the effectiveness of the mentioned treatments on the motivation of the participants, a one-way ANCOVA was run. A detailed representation of the results is provided in the next section, i.e., RESULTS.

RESULTS

The first research question was proposed to compare the effect of virtual and blended methods on the reading and listening skills of Iranian intermediate EFL learners. In order to answer this question, a Multivariate ANOVA (MANOVA) was used. This analysis is conducted when more than two groups are compared on more than one (two or more) dependent variables. In this research question, both reading and listening skills were taken into account; therefore, MANOVA was favorable. Table 1 represents the descriptive results on the post-test performance of the control and two experimental groups on listening and reading skills.

Table 1
Descriptive Results of the Reading and Listening Post-Tests in All Groups

	Group	Mean	Std. Deviation	N
Listening Post-Test	Traditional	7.8500	2.66112	20
	Virtual	10.7500	4.02460	20
	Blended	14.4000	3.26706	20
	Total	11.0000	4.27051	60
Reading Post-Test	Traditional	9.4000	3.08477	20
	Virtual	12.6500	3.67459	20
	Blended	14.7000	3.09669	20
	Total	12.2500	3.91704	60

As it is illustrated in Table 1, the EFL learners participating in the blended group (RM = 14.70, RSD = 3.09) and virtual group (RM = 12.65, RSD = 3.67) seemed to have higher reading grades compared with the ones in the control group (RM = 9.40, RSD = 3.08). The same improvement was observed in these groups (blended group (LM = 14.40, LSD = 3.26) and virtual group (LM = 10.75, LSD = 4.02) regarding the listening skill. However, the significance of the difference between the scores of these three groups, in post-tests, was not represented in Table 1.

Table 2
Multivariate Comparison of Reading and Listening Post-Tests in All Groups

	Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Intercept	Pillai's Trace	.971	939.633[b]	2.000	56.000	.000	.971
	Wilks' Lambda	.029	939.633[b]	2.000	56.000	.000	.971
	Hotelling's Trace	33.558	939.633[b]	2.000	56.000	.000	.971
	Roy's Largest Root	33.558	939.633[b]	2.000	56.000	.000	.971
group	Pillai's Trace	.601	12.238	4.000	114.000	.000	.300
	Wilks' Lambda	.404	16.042[b]	4.000	112.000	.000	.364
	Hotelling's Trace	1.462	20.098	4.000	110.000	.000	.422
	Roy's Largest Root	1.453	41.416[c]	2.000	57.000	.000	.592

As it is represented in Table 2, there was a significant difference in post-test scores of experimental and control groups in listening, $F(2, 56)$ = 939.63, $p \leq .00$ *(two-tailed)* and reading, $F(4, 11)$ = 16.04, $p \leq .00$ *(two-tailed)*. However, the mentioned table could not provide a two-by-two comparison between the groups to help identify the main different one. Therefore, a post-hoc comparison is presented in Table 3.

As illustrated in table 3, post-hoc comparison using Tukey HSD test indicated that the blended group (PV = 0.00, PT = 0.00) significantly improve the listening performance of EFL learners compared to the other two groups. Moreover, the virtual treatment also could result in significant improvement compared to the control group. In addition, regarding reading skill, both experimental groups (PV = 0.00, PB = 0.00) outperformed the control one; however, no significant difference was observed between the scores of virtual and blended groups (P = 0.13).

Table 3
Multiple Comparisons of Reading and Listening Post-Tests in All Groups

Dependent Variable	(I) group	(J) group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Listening Post-Test	Traditional	virtual	-2.9000*	1.063	.023	-5.4600	-.3400
		blended	-6.5500*	1.063	.000	-9.1100	-3.9900
	virtual	traditional	2.9000*	1.063	.023	.3400	5.4600
		blended	-3.6500*	1.063	.003	-6.2100	-1.0900
	blended	traditional	6.5500*	1.063	.000	3.9900	9.1100
		virtual	3.6500*	1.063	.003	1.0900	6.2100
Reading Post-Test	Traditional	virtual	-3.2500*	1.042	.008	-5.7588	-.7412
		blended	-5.3000*	1.042	.000	-7.8088	-2.7912
	virtual	traditional	3.2500*	1.042	.008	.7412	5.7588
		blended	-2.0500	1.042	.130	-4.5588	.4588
	blended	traditional	5.3000*	1.042	.000	2.7912	7.8088
		virtual	2.0500	1.042	.130	-.4588	4.5588

As illustrated in table 3, post-hoc comparison using Tukey HSD test indicated that the blended group ($PV = 0.00$, $PT = 0.00$) significantly improve the listening performance of EFL learners compared to the other two groups. Moreover, the virtual treatment also could result in significant improvement compared to the control group. In addition, regarding reading skill, both experimental groups ($PV = 0.00$, $PB= 0.00$) outperformed the control one; however, no significant difference was observed between the scores of virtual and blended groups ($P= 0.13$).

Table 4
Descriptive Results of Motivation Tests in All Groups

Dependent Variable: Motivation Post-Test			
Group	Mean	Std. Deviation	N
Traditional	10.3000	4.24388	20
Virtual	13.2500	2.07428	20
Blended	16.8500	2.45539	20
Total	13.4667	4.05248	60

The descriptive results obtained by conducting a one-way between-group analysis of covariance revealed that there was a difference between the post-test scores of blended ($M = 16.85$, $SD = 2.45$), virtual ($M = 13.25$, $SD = 2.07$), and traditional ($M = 10.30$, $SD = 4.24$) groups.

In order to discover the significance of the difference between the motivation post-test scores of all groups Table 5 is provided. The numerical findings of Table 5 reveal that there was a significant difference between the post-tests of experimental and control groups $F(1) = 138.49$, $p \leq .00$ *(two-tailed)*.

Table 5
Between Group Comparison of Motivation Test Scores in All Groups

	Dependent Variable: Motivation Post-Test					
Source	**Type III Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**	**Partial Eta Squared**
Corrected Model	430.481[a]	3	143.494	14.924	.000	.444
Intercept	1331.644	1	1331.644	138.493	.000	.712
Pre-motivation	.048	1	.048	.005	.944	.000
group	424.782	2	212.391	22.089	.000	.441
Error	538.452	56	9.615			
Total	11850.000	60				
Corrected Total	968.933	59				

In other words, the participants in blended group were more motivated toward perusing the instructional process compared to the ones in virtual and control groups.

DISCUSSION
The results of the present study contribute valuable insights into the effectiveness of different instructional modes, particularly virtual and blended learning, on the development of listening and reading skills, as well as student motivation. These findings align with and complement the outcomes of several other studies in the field of language education. Firstly, the study revealed that both virtual and blended instructional methods showed promise in enhancing reading and listening skills. However, the impact of these methods was more pronounced in specific areas, with virtual instruction benefiting reading skills and blended instruction favoring listening skills. This nuanced difference underscores the importance of tailoring instructional approaches to target specific language competencies. A noteworthy result was the significant advantage of the blended group over both the virtual and traditional face-to-face groups in terms of overall performance. This finding echoes the research conducted by Puji Permana Aji (2017), who found that blended instruction improved listening comprehension among EFL learners. It also aligns with Rahmawati's (2019) study, which indicated a preference for blended instruction among students, as they believed it led to higher development of listening and speaking skills. Furthermore, the present study highlighted the positive impact of blended instruction on

motivation, a result consistent with Syamsuddin and Jimi's (2019) findings that learners' motivation increased through blended learning. Another key takeaway from the present study is the improvement in reading skills with blended instruction, which is in line with the research conducted by Rombot (2021) and Yudhana (2021), who both observed statistically significant differences in post-test scores for reading comprehension in experimental groups compared to control groups. This reaffirms the notion that blended learning can effectively enhance reading skills in EFL contexts. Lastly, the positive outcomes of blended instruction on language learning have been reinforced by Alipour's (2020) study, which compared vocabulary improvement between online and blended classes and found no significant difference in scores between the two groups.

CONCLUSION
The findings of this study, when considered in conjunction with related research, highlight the numerous advantages of blended instruction in enhancing various facets of language learning, including listening, speaking, reading, vocabulary, and motivation. These collective findings underscore the importance of integrating technology and online components into language education while maintaining a balance with traditional teaching methods, thereby optimizing language learning outcomes. One noteworthy observation is the consistency in the outcomes of most experimental works, which align with the findings of the reviewed studies. This consistency underscores the robustness of the benefits associated with blended instruction, as

improvements were consistently significant in the blended groups.

Furthermore, this study stands out as an innovative contribution to the field, as it delved into the effects of virtual, blended, and face-to-face instruction. While most prior research primarily focused on general language performance or specific aspects of language learning, such as grammar or vocabulary, this study provided an in-depth analysis of the impact of blended instruction on listening and reading skills. Moreover, it identified the most affected skill, a unique insight not commonly found in existing literature. A key aspect of the present study's originality lies in its exploration of the combined effect of blended instruction on the acquisition of both listening and reading skills. Most similar research works have traditionally concentrated on language components or individual language skills in isolation. Regarding the second research question, which focused on the motivation of EFL learners, the findings demonstrated that the blended group significantly outperformed the virtual and control groups in motivation post-tests. These results are in line with Hamilton (2018) and Syamsuddin and Jimi (2019), who noted that blended learning environments tend to introduce novelty and enhance motivation and engagement among students. Rahmawati's (2019) study also supported this notion, indicating a preference for blended instruction among EFL learners due to its potential for higher listening and speaking skill development.

In summary, the study's results emphasize that technology-based teaching methods can significantly improve the quality of listening and reading skills among students, particularly when combined with traditional approaches. Furthermore, the study highlights the potential of technology-assisted teaching in aiding English instructors who may not have access to advanced technologies. Additionally, it suggests that a combination of online and face-to-face instruction can make education more accessible and flexible, reducing educational pressures and enhancing motivation for language learning. It is evident from this research that educators should become familiar with new devices and techniques that facilitate language learning and teaching, especially in an era where technology plays an increasingly crucial role. By embracing technology in language education, we can provide accessible and practical tools to enhance the language learning experience for EFL learners and educators alike. Ultimately, the study supports the idea that the incorporation of technology into language classes can significantly facilitate the learning process, opening up new avenues for language acquisition and making it more engaging and effective.

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