

Research Article

The Effects of Supplemental Blended Learning on Listening Comprehension in Iranian EFL Learners

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Abstract

This study investigates the effect of supplementary blended learning on the listening comprehension skills of Iranian EFL learners. A total of fifty male students were selected from a population of one hundred at Pardis Language Institute, Hamadan, using double-stage sampling. Participants were assigned to either a control group or an experimental group. Both groups received listening instruction based on American English File (Book 2); however, the experimental group was provided with supplementary listening materials and teacher feedback via the Telegram application, allowing for prior exposure to the listening topics outside of class. The research adopted a quasi-experimental pretest-posttest design, and data were analyzed using descriptive statistics and the Mann-Whitney U test. The results demonstrated that supplementary blended learning had a statistically significant positive impact on learners' listening comprehension. Additionally, a 16-item questionnaire administered to the experimental group indicated favorable learner perceptions of the blended learning model, highlighting increased engagement and satisfaction. These findings suggest that incorporating technology-assisted blended learning strategies into traditional EFL listening instruction can enhance both listening comprehension and learner motivation. The study recommends that teachers and curriculum designers consider integrating such approaches to improve learning outcomes in similar contexts.

Keywords: Supplemental Blended Learning, Listening Comprehension, Iranian EFL Learner

Introduction

The cognitive revolution of the 1970s marked a pivotal shift in the understanding of language learning processes and learners, prompting increased efforts to identify more effective strategies that address learners' needs (Rivers, 1986). This shift in research focus has brought learning strategies to the forefront, which are defined as specific thoughts or behaviors that individuals employ to facilitate comprehension,

learning, or retention of new information (O'Malley & Chamot, 1990, p. 1). Theoretical perspectives further emphasized that learning strategies facilitate improved comprehension, learning, and retention by guiding how learners process information (Vandergrift, 2007).

In language teaching, listening comprehension is a critical area where learning strategies play a fundamental role. Vandergrift (2007) highlights that listening is essential to second language acquisition because it is a primary means for learners to build knowledge and use the language effectively. Moreover, Rost (2002) asserts that comprehending spoken language is a prerequisite for acquiring a second language. For EFL learners and teachers, mastering listening comprehension has always been a significant concern, as understanding native speakers' speech can often be a challenging goal (Hayati, 2009).

Considering how crucial listening is to language acquisition, it must occupy a central role in any language classroom. Unlike listening comprehension in a first language, listening comprehension in a second language is not an inherent ability and requires explicit instruction to develop effectively. Learners must be guided to understand the nuances of spoken language and the strategies needed to improve comprehension (Rost, 2002, as cited in Vandergrift, 2007).

Furthermore, listening comprehension and blended learning have both received growing scholarly attention, as researchers explore methods to improve language acquisition in increasingly digital learning environments.

However, in Iran, traditional listening instruction methods, such as the Grammar Translation Method (GTM) and Audiolingual Method (ALM), continue to dominate and are often perceived as monotonous by adult learners (Sayed, 2005). These methods fail to engage students effectively, underscoring the need for alternative approaches that enhance listening skills in EFL contexts.

In response to the increasing emphasis on communication in foreign language learning, teachers and researchers continually seek innovative ways to enhance instructional effectiveness, access authentic materials, and provide students with strategies that improve language proficiency (Wang, 2005). One promising approach that has gained significant attention in recent years is the integration of technology into language learning. Researchers, such as O'Flaherty and Philips (2015), assert that technology can positively impact EFL learners' listening abilities.

Blended learning, in particular, has emerged as a powerful model that combines traditional face-to-face instruction with technology, offering students the flexibility to learn independently while promoting better language acquisition outcomes (Obari, 2012; Kırkgöz, 2011). Blended learning environments provide a dynamic space where students engage more fully, both in and outside the classroom, facilitating deeper learning (O'Flaherty & Philips, 2015). Within this framework, supplemental blended learning stands out, as it allows learners to complement face-

to-face instruction with online activities, enhancing their overall language development.

Although numerous studies support the efficacy of blended learning in improving language proficiency, limited research has explored the specific impact of supplemental blended learning on listening comprehension among Iranian EFL learners. This gap is particularly important given the dominance of traditional listening instruction methods in Iran, which often fail to meet learners' communicative needs.

Therefore, the present study aims to address this gap by investigating whether supplemental blended learning can enhance listening comprehension. The findings may offer valuable insights for curriculum designers and language instructors seeking more effective teaching methods tailored to EFL contexts.

In order to fulfill the objective of the current study, the subsequent research question was formulated;

Does supplemental blended learning have any statistically significant effect on Iranian EFL learners' listening comprehension?

In line with the above question, the following null hypothesis was formulated:

Supplemental blended learning does not have any statistically significant effect on Iranian EFL learners' listening comprehension.

Method

Participants

The study initially involved a pool of 100 Iranian male EFL learners enrolled at Pardis Language Institute in Hamadan, Iran. From this population, 70 learners were selected through convenience sampling based on their availability and willingness to participate. These 70 participants then took the *Solution Placement Test* (Edwards, 2007) to ensure homogeneity in proficiency. Based on the test results, 50 learners whose scores fell within the intermediate range (25–40, as defined by Edwards, 2007) were retained for the study. The remaining 20 participants were excluded as their scores fell outside the target proficiency band. The final sample of 50 intermediate-level learners (aged 14–26) was randomly assigned to two groups: an experimental group (n=25) and a control group (n=25). This two-stage sampling process—initial convenience sampling followed by proficiency-based filtering—ensured a homogeneous sample for investigating the effects of supplemental blended learning on listening comprehension. All participants were male due to accessibility and cultural considerations in the research context. This decision was also made to control for potential gender-based variation in listening comprehension, ensuring greater homogeneity in the sample.

Instruments

The following instruments were employed in the current study to ensure the selection of homogenous participants, as well as to assess their listening comprehension and perceptions toward blended learning:

Solution Placement Test

The Solution Placement Test (Edwards, 2007) was conducted to identify a homogeneous group of participants. This assessment is divided into three parts: the initial part comprises 50 multiple-choice questions that evaluate grammar and vocabulary, the second part features 10 items focused on reading comprehension. The final part includes an optional writing exercise. The first two sections, comprising the multiple-choice and reading tasks, were completed within a 45-minute session. The test was piloted on a sample of 15 learners with similar characteristics to the study population, and necessary adjustments were made based on item analysis. To ensure the construct validity of the test, content experts reviewed the items for alignment with intermediate proficiency descriptors. The test's reliability was previously established by Shih (2011), with a reported reliability coefficient of 0.68.

Listening Comprehension Pretest and Posttest

To evaluate participants' listening comprehension, the pretest and posttest were selected from the *Basic Tactics for Listening* test booklet (Richards & Trew, 2011), which contains well-structured intermediate-level items suitable for this study. Despite the learners' intermediate proficiency, this source was chosen for its clarity, standardization, and demonstrated reliability in similar contexts. This book is widely recognized for its effectiveness in developing listening and conversational skills. A set of 20 multiple-choice listening items, adapted from this resource, was piloted on a group of 10 intermediate learners, similar in proficiency to the target sample. The reliability of the test, calculated using the Brown Prophecy Formula, was 0.71. To examine the validity, the test content was reviewed by two TEFL specialists, and feedback was incorporated to ensure alignment with the listening objectives of the curriculum. Construct and face validity were thus supported through expert review and piloting. The participants were allotted 30 minutes to complete this listening assessment.

Materials

The study utilized the book, *American English File*, to support the instructional interventions. The American English File (Book 2), authored by Latham-Koenig, Oxenden, and Boyle (2011), was selected as the primary teaching resource. Published by Oxford University Press, this book was used to teach listening skills to both the experimental and control groups. The listening sections from this book were specifically employed to deliver the instructional content.

Procedure

The study began with the selection of participants through a two-stage sampling process, as described earlier. After this selection, the participants were divided into two groups: experimental and control groups, with 25 participants in each group.

Following the group division, a listening comprehension pretest was administered to all participants in both groups. The pretest consisted of 20 listening comprehension items sourced from the intermediate level of the Basic Tactics for Listening test booklet (Richards & Trew, 2011). The participants were given 30 minutes to complete the pretest, which aimed to assess their initial listening abilities.

After the pretest, the treatment sessions commenced. Both groups used the listening sections of American English File (Book 2) as the core instructional material. However, the two groups differed in the method of instruction. The control group followed the conventional method of teaching listening used at the institute. In contrast, the experimental group was exposed to a supplemental blended learning model.

In the blended learning model for the experimental group, participants were provided with supplementary listening materials (e.g., audio clips and sample conversations) aligned with the course topics before class sessions. These materials, which included sample conversations, vocabulary, and grammar lessons, aligned with the American English File topics. The content was shared via a common social networking platform, the Telegram application, which also served as a medium for students to ask questions and receive teacher feedback. This approach ensured that students were adequately prepared before attending in-class sessions, establishing a strong connection between out-of-class and in-class activities.

Upon completion of the treatment sessions, a posttest, similar in structure and content to the pretest, was administered to the control and experimental groups to assess any changes in listening comprehension.

Results

Descriptive Statistics of the Placement Test

The Solution Placement Test (SPT) was carried out to ensure participants were as homogeneous as possible regarding their level of general English competence.

The descriptive statistics of the SPT are presented in the following table.

Table 1

The Descriptive Statistics of the Placement Test

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Solution Test	70	19.00	64.00	38.3571	11.70908	137.102
Valid N (listwise)	70					

Table 1 presented above illustrates the descriptive statistics of the SPT. It is evident from this table that the mean and standard deviation for the participants

were 38.35 and 11.70, respectively. Additionally, Figure 1 below displays the histogram and the normal curve for the initial participants.

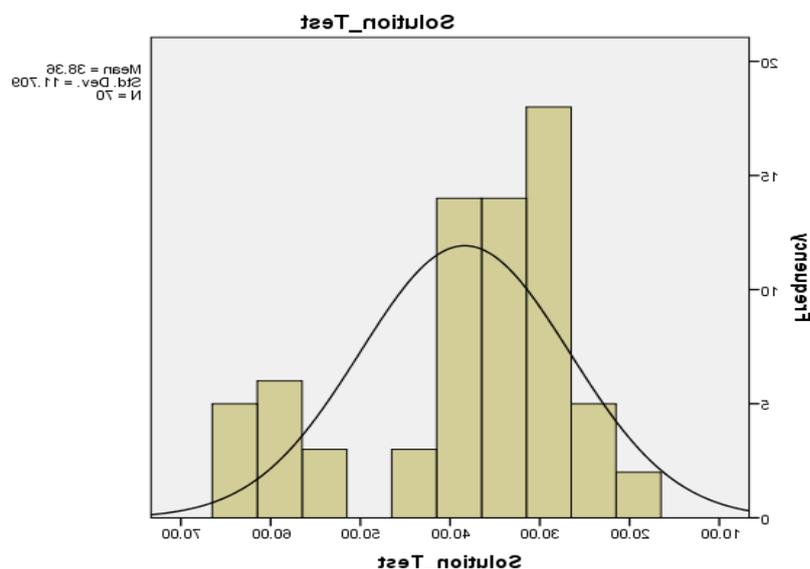


Figure 1. Histogram with normal curve for the SPT scores of the initial members

Descriptive Statistics of the Homogenized Participants

The descriptive statistics for the homogenized participants are displayed in the following table.

Table 2

The Descriptive Statistics of the Homogenized Participants

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Homogenized	50	25.00	40.00	32.90	4.210	17.724
Valid N (listwise)	50					

Table 2 above shows the descriptive statistics of the homogenized members. As can be seen, the mean and the standard deviation of the homogenized participants were 32.90 and 4.21, respectively. Hence, out of 70 participants, 50 were considered homogenous members at the intermediate level based on their scores of SPT ranging from 25 to 40 (Edwards, 2007). Figure 2 below shows the histogram with a normal curve for the homogenized participants.

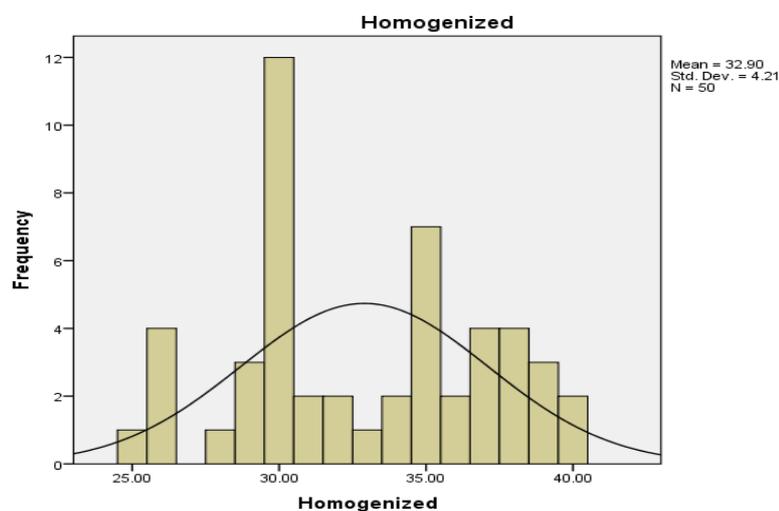


Figure 2. Histogram with normal curve for the SPT scores of the homogenized members

Answering the Research Question

This study's research question was whether supplemental blended learning could significantly affect Iranian EFL learners' listening comprehension. The following table shows the descriptive statistics of the two groups' pretests and posttests.

Table 3

The Descriptive Statistics for the Pretest and Posttests Scores

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Cont_Pre	25	7.00	15.00	11.5200	2.16256	4.677
Cont_Post	25	8.00	17.00	12.0800	2.46509	6.077
Exp_Pre	25	9.00	14.00	11.6000	1.35401	1.833
Exp_Post	25	10.00	18.00	14.1600	1.99332	3.973
Valid N (listwise)	25					

As it can be observed in the above table, the mean scores for the pretest and posttest of the control group were 11.52 and 12.08 while the mean scores for the pretest and posttest of the experimental group were 11.60 and 14.16, respectively. Since the data were not normally distributed for the pretest of the control and experimental groups ($P < .05$), the gain score comparison, which is the difference between the posttest and the pretest, was taken into account. The descriptive statistics of the gain score of the two groups are shown below.

Table 4
Descriptive Statistics for the Gain Scores of the Control and Experimental Groups

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Gain Control	25	-4.00	5.00	.56	2.31	5.34
Gain Expperimental	25	-1.00	5.00	2.56	1.78	3.17
Valid N (listwise)	25					

The control and experimental groups' mean and standard deviation are .56, 2.31 and 2.56, 1.78, respectively. Since the data were not normally distributed for the two sets ($P < .05$), the appropriate test for mean comparison would be the Mann-Whitney U test. The result of the inferential test is shown below.

Table 5
The Result of the Inferential Test for the Comparison of the Control and Experimental Groups

	Gain Scores
Mann-Whitney U	156.000
Wilcoxon W	481.000
Z	-3.072
Asymp. Sig. (2-tailed)	.002

According to Table 5, there was a significant difference in the average score between the two groups, $U = 156, p < .05$. For this reason, the investigator safely denies the null hypothesis, that is, supplemental blended learning had a statistically significant impact on the listening comprehension of Iranian EFL learners.

Discussion

This study aimed to examine the effect of supplemental blended learning on Iranian EFL learners' listening comprehension. The findings indicated that the blended learning approach significantly improved the listening comprehension of the experimental group, leading to the rejection of the null hypothesis.

These results align with previous research, reinforcing the effectiveness of blended learning in enhancing language skills. For instance, Sholihah, Permadi, and Umamah (2018) found that portfolio-based blended learning significantly improved listening skills, similar to the gains observed in the present study. While their focus was on portfolio integration, the current study employed a supplemental blended model, yet both approaches enhanced listening comprehension—highlighting the flexibility and adaptability of blended learning frameworks. Soltani, Tehrani, and Tabatabaei (2012) reported improvements in vocabulary through blended instruction, which, while targeting a different skill, supports the broader effectiveness of integrating technology with face-to-face teaching in EFL

contexts. Likewise, Abaeian and Samadi (2016) found gains in reading comprehension among intermediate learners, suggesting that blended learning benefits a range of skills and proficiency levels. Although these studies differ in focus and implementation, the consistent pattern of positive outcomes underscores the potential of blended learning as a versatile and impactful pedagogical tool.

Moreover, the current study's findings are consistent with Ghahari and Ameri-Golestan (2014), who found that blended learning improved writing performance among EFL learners. Similarly, Kazu and Demirkol (2014) reported that students who received blended instruction in a high school biology course—specifically on the topic of genetics—achieved significantly higher scores on their final exams compared to those taught through traditional methods. This indicates that blended learning can enhance academic performance in content-based subjects. Finally, Hsieh, Wu, and Marek (2016) demonstrated the motivational benefits of blended learning, which engaged learners and improved their oral ability and idiomatic knowledge.

The implications of these findings extend to various stakeholders, including language learners, teachers, and material developers. EFL learners need environments that simulate real-life use of English, which can be fostered through the integration of technology in the classroom. For learners, the integration of technology into classroom settings provides opportunities to simulate authentic language use and foster deeper engagement. As this study revealed the benefits of supplemental blended learning on listening skills, learners are encouraged to leverage digital tools alongside traditional classroom methods. By combining these approaches, they can enrich their language practice and better engage with the learning material. This hybrid engagement not only supports skill development but also promotes learner autonomy and motivation.

Teachers play a pivotal role in shaping learners' experiences. They are encouraged to incorporate online strategies and supplemental blended learning in their teaching, particularly in listening comprehension. This method makes lessons more engaging and aligns with the current technological trends in education, making the learning process more accessible and efficient.

Material developers are urged to create resources that blend traditional exercises with online content. Given the positive outcomes observed in this study, such materials should allow students to benefit from both in-class and digital exercises. This hybrid approach can facilitate more versatile learning and provide a bridge between classroom instruction and independent practice.

While this study focused on the effect of supplemental blended learning on listening comprehension, future research could explore other models of blended learning, such as the flex model, and their impact on different language skills, including speaking. Investigating how these approaches influence various aspects of language acquisition would contribute further to the field of EFL education.

Conflict of interest: None

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