The Effect of Using VOA Podcast on Students Intensive Listening Skill

1. Andre Gemuruh Gulo
2. Ikhsanudin
3. Eka Fajar Rahmani

1,2,3 Universitas Tanjungpura, Indonesia

Abstract
The purpose of this research was to find out the effect of podcast or VOA podcast in improving the eight grade students English listening skill. This research utilized a sample of 30 students from a class, comprising 13 males and 17 females. Data collection for this research involved the use of measurement techniques, specifically the gap-filling test as the instrument. The collected data was analyzed to assess the impact of podcasts on students' listening skills. The results of the study revealed a significant improvement in students' listening skills with a t-value of 7.131, exceeding the critical value of 2.045 (t-value = 7.131, df=29). This indicated a significant impact of using podcasts in EFL students' listening learning (7.131 > 2.045) with a medium effect size of 0.77. Therefore, the findings suggest that the use of podcasts effectively contributed to the improvement of students' listening skills.

Keywords
Intensive listening skill
Podcast
Pre-experimental
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Introduction

Listening skill holds paramount importance as one of the fundamental language skills, particularly for English as a Foreign Language (EFL) students. Developing proficient listening abilities not only enhances their comprehension of English but also cultivates effective communication skills for future use. Listening involves not only hearing the words spoken by others but also engaging emotionally with the speaker. In order to effectively improve students' listening skills, intensive listening skill need to be honed first as it plays a vital role for accurate perception in advanced comprehension and listening (Rost, 2015). Therefore, developing and improving listening skills, especially the intensive listening skill as the base skill becomes crucial for accurately interpreting and comprehending the speaker's message during interactions.

The significance of listening skills for English as a Foreign Language (EFL) students cannot be overstated, as they often encounter challenges in this area. Vanpatten (as cited in Rost, 2015) highlighted a major issue faced by EFL students in listening, which is the difficulty in simultaneously attending to both the lexical content and grammatical structure of a message. Rost (2015) further emphasizes the four factors that contribute to the struggles of EFL students in learning listening: neurological development, motivational issues, input, and transfer techniques. Additionally, Deswarni (2016) emphasizes the importance of motivation in English language learning, as it empowers students to recognize their strengths and build the confidence needed for language mastery. These factors significantly influence EFL students' ability to comprehend spoken English effectively, highlighting the need for targeted interventions and instructional strategies to address these challenges.

Eight grade students of SMPN 13 Pontianak were found to have challenges in improving their English skills. The pre-observation indicated that the average score of basic competence 1 for eight-grade students from six classes was 58.31, with the lowest average at 43.63 and the highest at 75.93. Some students obtained a low scores, ranging from 30 to 60. This data highlights the English proficiency issues among the students. Moreover, the pre-observation also revealed a lack of also English basic skills and motivation in learning English. Based on these findings, the researchers decided to explore an alternative English teaching method using podcasts as the medium.

VOA Learning English is well-known for its role in English language learning. These open-source platforms provide daily news updates and podcasts on many themes using multimedia resources from websites and smartphone apps. VOA podcast has many English-learning resources (Mahmudah et al., 2019). This channel, especially podcasts, helps improve EFL students' listening abilities. VOA podcasts teach vocabulary and pronunciation. Abdi and Makiabadi (2019) lauded VOA Learning English. Podcasts, vocabulary lists, and transcriptions promote language and listening. Advantages include VOA's native-speaker material. This teaches word pronunciation and phonology.
Fast speed dictation, pause and paraphrase, listening close, error identification, jigsaw dictation, group dictation, communicative dictation, and listening games should be used with podcasts to teach intense listening (Rost, 2015). These interactive activities help students enhance their intensive listening skills as it is engaging and effective activities that can improve students' listening abilities. According to El-Dali (2017), advanced language learners employ a range of strategies to improve their listening skills. Therefore, by combining several of these diverse activities and selecting appropriate assignments tailored to students' needs, curriculum, and school syllabus, the learning process can remain both engaging and captivating, ultimately leading to improved listening skills.

Listening media from the internet, particularly podcasts, have been recognized as effective tools for enhancing students' listening skills. Numerous studies have demonstrated the potential of podcasts in improving the listening skills of EFL or ESL students (Ahmed, 2015; Yoestara & Putri, 2019; Syahabuddin & Rizga, 2021; Nisa et al., 2022; Sabrila & Apoko, 2022). These findings underline the broad applicability of podcasts in improving listening skills across various grade levels and skill levels. Additionally, Nirwana's (2020) study highlighted the positive impact of VOA video news on pupils' listening abilities, further emphasizing the role of podcasts and VOA resources in improving EFL students' listening skills, especially among fourth, fifth, and tenth graders.

In addition in improving students' listening skills, podcasts have also been recognized as an effective tool in enhancing students' motivation for learning English (Constantine, 2007; Scutter, 2010; Yaman, 2016). Various studies revealed that the use of podcasts not only improves listening skills but also effectively motivates students in their English language learning activities (Abdulrahman et al., 2018; Rahman et al., 2018; Indahsari, 2020). These studies highlights the significant influence of integrating podcasts in education and it proved to be a valuable tool for students, enriching their language skills and empowering them to recognize their own strengths while building the necessary confidence to master the language (Deswarni, 2016).

The studies that have been mentioned provide evidence that utilizing podcasts and VOA as learning resources is beneficial for the development of students' listening abilities. However, there is a gap in this research regarding the impact of podcasts on the listening skills of eighth-grade students at SMPN 13 Pontianak. This study also aimed to address this gap by using podcasts from "Voice of America" as the primary tool. The podcasts will be employed both for testing the students' listening skills and as part of the treatment to improve their listening abilities. By exploring the effectiveness of podcasts in this specific context, the research aims to contribute to the existing body of knowledge on improving students' listening skills.

VOA podcasts were tested in a pre-experimental method to teach eighth-graders listening skills. Pre-experimental research methodology does not randomize people to groups or control extraneous variables, according to Ary (2019). This study used a pre-experimental design with a pre-test. The treatment was podcasts, followed by a post-test to measure students' intensive listening skills. Podcast consumption improves listening abilities without random assignment or considerable control over extraneous variables in this design.
This research covers two main questions: (1) Does podcasting influence SMPN 13 Pontianak students' intensive listening skills in autonomous learning? (2) How much does using VOA podcasts to teach intense listening at SMPN 13 Pontianak affect students? Aligned with these questions, the research purposes are (1) to explore the potential impact of podcasts as a medium on the intensive listening skills of eighth-grade students at SMPN 13 Pontianak, and (2) to determine the effect size of VOA podcasts on these skills.

Method

Pre-experimental research method was utilized in this research. Pre-experimental design was defined as research where subjects are not randomly assigned to groups or where other approaches to control for auxiliary variables are utilized by Ary et al. (2019). Pre-experimental designs are centered on examining a particular or single group that is subjected to the experimental intervention (Leavy, 2017). Cresswell (2018) adds that research instruments provide detailed, dependable, and ordered results. Pre-test measure a characteristic or attribute before the treatment and a post-test assessed the same trait or characteristic following the treatment. Thus, this study gave all students a pre-test before classroom treatment and post-test after the treatment.

Table 1. One group pre-test and post-test design

<table>
<thead>
<tr>
<th>Pre-test</th>
<th>Treatment</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>O₁</td>
<td>X₁</td>
<td>X₂</td>
</tr>
</tbody>
</table>

The sample for this study were selected from the eighth-grade students of SMPN 13 Pontianak, representing the population. As outlined by Ary et al. (2019), a population denotes a specific group of individuals, events, or objects that are the primary focus of a study. One particular class was chosen as a sample to represent the larger population of SMPN 13 Pontianak. The cluster random sampling technique was employed, as advised by Mackey and Gass (2022). This method involves selecting groups or clusters rather than individual participants. In this research, Class VIII A, comprising 30 students with 13 males and 17 females students, was designated as the cluster class.

A test was employed both in the pre-test and post-test as the primary instrument to assess the students' intensive listening skill. The test was administered to measure the students' intensive listening skill before the treatment and to evaluate whether their intensive listening skills improved or not. Hughes (2002) stated that tests serve specific purposes when administered by researchers. The test administered to the students in this research consisted of two sections: an essay question and ten fill-in-the-blank questions focusing on vocabulary and grammar. The design of the test instrument took into account the micro skills mentioned by Brown and Abeywickrama (2019). The test was designed to be ended when the podcast ended, with the podcast being played twice.

The statistical techniques was conducted to analyze the collected data, where the formula for the t-value or paired t-test were utilized, as proposed by Ary et al. (2019), to calculate the statistical significance of the data. Additionally, the researchers employed Cohen's d formula, as proposed by Cohen (1988), to calculate the effect...
size of the data. These statistical formulas were chosen to effectively address the research questions posed in this study.

The collected data were evaluated and analyzed using a variety of procedural steps. Collecting the student test scores is the first step, and computing the mean score of these tests comes next. The third stage then entails figuring out the difference in scores between the outcomes of the pre-test and post-test. The process of determining the values for the t-test and t-table falls under the fourth stage. The analysis of the hypotheses in the final step by comparing the t-test and t-table values with the intention of either supporting or disproving each hypothesis.

This study utilized a single-group design, therefore a paired t-test was utilized. When the calculated t-test value is greater than the t-table value (t-test > t-table), the alternative hypothesis (H_a) is accepted and the null hypothesis (H_o) is rejected. In contrast, if the t-test is smaller than the t-table (t-test < t-table), Ho is accepted and Ha is rejected. The researchers utilized a significance level of 0.05 and the equation t-table = N - 1 to determine the t-table value. The researchers also evaluated the effect size to determine the magnitude of the impact that listening to VOA podcasts had on students' intensive listening skills. The specific formula that was employed in this study are listed below:

Score Difference (Interval) : D = X_2 - X_1

Paired T-test formula : t = \frac{D}{\sqrt{\frac{\sum D^2 - (\sum D)^2}{N}} \sqrt{\frac{N(N-1)}}}

Standard Deviation of Differences: SDd = \sqrt{\frac{N \cdot \sum D - (\sum D)^2}{n(n-1)}}

Effect size formula : d = \frac{\overline{X}_2 - \overline{X}_1}{SDd}

Results

Based on the treatments that has been done from the research, it was found that there was a significant improvement in the mean score of the students. The demonstration of the improvement in students' intensive listening skills can be observed through the pre-test and post-test scores, as depicted in Figure 1 and Figure 2 below:
Based on the data above, it was found that the total score of students in the pre-test was 133. Next, the total score was divided by the total number of students that are 30 students. Then, it was discovered that the mean score was 4.43. For the post-test, it was found that the total score of students in the post-test was 199. The total score was divided by the total number of 30 students to calculate the mean score. The result indicated that the score for the post-test was 6.63.

The aforementioned findings make it clear that students' abilities to listen intently have improved. The results showed a significant improvement, with scores rising from 4.43 in the pre-test to 6.63 in the post-test. This highlights the significant improvement made through the use of VOA podcasts to improve students' intensive listening.

Table 2. Mean Different Calculation

<table>
<thead>
<tr>
<th>Initials of Name</th>
<th>Pre-test</th>
<th>Post-test</th>
<th>Interval (D)</th>
<th>Squared interval(D^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.S.R</td>
<td>3</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A.T</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>A.R</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>A.D.A</td>
<td>10</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>A.B</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>A.K</td>
<td>8</td>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>D.A.F</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>D.S.A</td>
<td>5</td>
<td>8</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>D.D.A</td>
<td>1</td>
<td>5</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>D.A</td>
<td>7</td>
<td>6</td>
<td>-1</td>
<td>1</td>
</tr>
<tr>
<td>K.P</td>
<td>7</td>
<td>8</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>H.L.A</td>
<td>8</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>I.H</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>16</td>
</tr>
<tr>
<td>J.R.A</td>
<td>5</td>
<td>7</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>
The calculation of the squared differences of the scores ($\sum D^2$), and then summing them, as well as squaring the sum of the difference scores ($\sum D)^2$ above were found to be $\sum D^2 = 228$ and $(\sum D)^2 = 51,984$. Subsequently, these values were utilized in the paired t-test formula to derive the final t-test result, where it was found that the $T$-value of 7.131, which exceeded the critical value for this study ($t$-value = 7.131, df=29, $7.131 > 2.045$).

Table 3. Paired Samples Test

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PreTest</td>
<td>-</td>
<td>1.68973</td>
<td>0.30850</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-7.131</td>
</tr>
<tr>
<td>PostTest</td>
<td>2.20000</td>
<td>2.83095</td>
<td>1.56905</td>
<td>-</td>
<td>29</td>
<td>0.000</td>
<td></td>
</tr>
</tbody>
</table>

The presented table provides an overview of the findings obtained in this study, revealing a t-value of -7.131 (7.131). The results indicated that the significance level (2-tailed) was 0.000, which is less than the predetermined significance of 0.05 (0.000 < 0.05). This suggests that there was a statistically significant impact observed in the utilisation of VOA podcast on students' intensive listening skill. The figure below also demonstrates a notable impact, as evidenced by the test statistic “t-test” equivalent to 7.1313.
Therefore, the implementation of VOA podcast in students' intensive listening learning found to be effectively improved the students' intensive listening skill and the alternative hypothesis (H_a) (The intensive listening skills of students significantly impacted by the use of VOA podcasts as a learning tool) was accepted and the null hypothesis (H_o) (The intensive listening skills of students are not significantly impacted by the use of VOA podcasts as a learning tool) was rejected. Moreover, the calculated effect size in this research was determined to be 0.77, indicating a medium level of effect size as outlined in Cohen's effect size table (Cohen, 1988). Therefore, it can be concluded that the implementation of VOA podcasts significantly impacted students' improvement of intensive listening skills at a medium level.

**Discussion**

The main objective of this research was to find out how using a VOA podcast as a teaching tool affected the students at SMP Negeri 13 Pontianak's intensive listening skill. The study's conclusions indicated that using VOA podcasts improved students' listening skills, as shown by the findings that using VOA podcast indicated a significant effect of the intervention on students' intensive listening skills, as evidenced by a t-value of 7.131, which was higher than the critical t-value (7.131 > 2.045).

The aforementioned results align with the results of previous studies found a significant impact of podcasts on students' listening comprehension (Ahmed, 2015; Nisa et al., 2022; Sabrila & Apoko, 2022; Syahabuddin & Rizqa, 2021; Yoestara & Putri, 2019), with the experimental group showing better results compared to the control group. Similarly, Nirwana (2022) conducted a study on the use of VOA videos and found significant improvements in the intensive listening skills of middle school students. These consistent findings suggest that the use of VOA podcasts in this research is in line with previous studies investigating the effectiveness of VOA podcasts or videos as instructional media for teaching listening skills to students.
By providing authentic conversations from native speakers and exposing students to a variety of voices, dialogues, and activities (Mcminn, 2008; Harmer, 2015), podcasts proved to be beneficial in improving students' intensive listening skills, especially the intensive listening skill. Podcasts have been shown to help students develop their intensive listening skills as these elements were tested and targeted during both the pre-test and post-test stages of the research, it were effectively address micro skills like intonation contours, word order patterns, and grammatical word classes (Brown & Abeywickrama, 2019). The development of these intensive listening skills were obtained by the use of podcasts during both the testing and treatment phases.

However, the intervention tool used to affect students' intensive listening skills in this research was VOA podcast, whereas, in the previous study conducted by Nirwana (2022), news videos from VOA were used as the instructional media. Furthermore, this research focused on teaching the students listening skills related to past-tense materials during the time of the study. The findings suggest that incorporating VOA podcasts as supplementary materials can improve students' understanding of the taught materials in the classroom.

In addition to the research findings, the researchers encountered several challenges during the data collection process. The students tended to be loud, and the overall classroom environment sometimes became noisier than the speaker being used. To address this issue, the researchers implemented an icebreaking activity to capture the students' attention and create a more relaxed atmosphere for learning. The researchers also encouraged discussions and games after the activity has been done to motivate the students and actively engage them in listening activities.

This research has proven its utility by focusing on the impact of employing VOA podcasts on intensive listening skills, a distinct angle compared to prior studies which generally addressed the effects of podcasts on overall listening skills. Unlike earlier investigations that employed different types or sources of podcasts, or incorporated VOA video news as a treatment tool, this study specifically investigated the potential of VOA podcasts in students' intensive listening skill. The findings indicated that integrating VOA podcasts into the classroom, coupled with suitable intensive listening skill activities, led to a notable enhancement in students' listening abilities. This emphasized the significant positive effect of utilizing VOA podcasts for improving students' intensive listening skills.

**Conclusion**

According to the findings, VOA podcasts improved SMP Negeri 13 Pontianak students' intensive listening skills in 2022/2023. The students' scores increased significantly at the end of the research, and the t-value was greater than the t-critical value (7.131 > 2.045), showing that the treatment improved intensive listening skills. The medium effect size of 0.77 supports the conclusion that VOA podcasts improved students' listening skills. Thus, VOA podcasts had a medium impact on students' intensive listening skill at SMP Negeri 13 Pontianak.
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