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The Correlation Between Elsa Speak and Student Listening Achievement at Senior High School

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Abstract

This study aims to examine the relationship between the use of the Elsa Speak application and the listening achievement of class XI IPA students at MA Al-Djufri involving 26 students. This study only uses Elsa Speak as a benchmark for students' listening ability and is limited to class XI IPA students at MA Al-Djufri. Data collection was carried out using questionnaires and tests, which showed that students obtained an average score of 89.62 after using the application. The results of the study showed a significant positive correlation, with a correlation coefficient of 0.670 indicating that regular use of the Elsa Speak application can improve listening achievement. This shows that the application plays an important role in improving students' listening achievement, which confirms a strong relationship between the use of the application and students' listening achievement.

Introduction

English proficiency plays a crucial role in shaping students' learning experiences and career opportunities. As a result, it is considered a fundamental skill that students must master in the fields of education and technological advancement. Therefore, English is considered an important skill that students must master both in education and technological advancement. Alzamil (2021) stated that There are four basic aspect in learning English: writing, listening, speaking, and reading. Among these essential language skills, listening. Among the four main language skills, listening is essential skill as it forms the foundation for effective communication and comprehension.

Listening is the active process of receiving, understanding, interpreting, and responding to messages delivered verbally or non-verbally in communication. According to Singh (2023) listening is a complex construct that goes beyond just hearing, involving various sensory processes and cognitive functions. In addition, this ability not only involves physical hearing, but also a deep understanding of the meaning the speaker wants to convey. By listening effectively, one can enhance the quality of interpersonal relationships, reduce misunderstandings, and develop empathy for others. (Sudewi, 2021) stated that listening skills are Effective listening is crucial for successful communication. Without strong listening skills, messages can be easily misinterpreted, leading to communication breakdowns and causing frustration or irritation for the sender.

In English language learning, listening is one of the four important basic skills. Sharma & Puri (2020) highlighted that listening, along with speaking, reading, and writing, are four important skills for effective language acquisition and meaningful social communication. They emphasize the need for teachers to use a variety of techniques to integrate these skills and improve students' proficiency and confidence. In addition, speaking, reading, and writing help students understand conversations, instructions, and other forms of oral communication. While by mastering listening skills, students can improve their overall English skills and communicate more effectively.

Moreover, listening achievements are one of the basic components in language and communication learning. According to Loan et al (2024) listening achievements are very important to be able to obtain effective communication and achieve academic excellence in the world of education. Therefore, listening proficiency is an active process that demands focus and the ability to interpret not only spoken words but also the speaker's tone, intonation, and context. According to Wiraatmaja et al. (2022) research has indicated that listening is one of the most challenging English skills compared to other language abilities.

Strengthening listening skills can be particularly difficult due to factors such as unfamiliar accents, rapid speech, or limited exposure to English as the target language. To support the development of listening skills, the use of technology, including artificial intelligence, can be an effective method for enhancing English proficiency. Since young people, especially high school students, are already familiar with these digital tools, educators should adopt more innovative approaches to create a more advanced and dynamic learning environment. (Azizullah Sidiq, 2022).

In education, media plays a role as an aid in the teaching and learning process to improve student understanding and engagement in the material presented. As stated by Padang & Sitepu (2023) media plays an important role in improving the teaching and learning process in the world of education. In addition, Yanuari (2019) stated the use of appropriate learning media in the teaching and learning process

can be a more effective and efficient tool in achieving learning goals. Thus, it can be concluded that learning media has a very important role in increasing the effectiveness of the teaching and learning process. The use of appropriate media can help improve student understanding and involvement in learning. In addition, educational media also contributes to increasing student motivation to learn.

This is accordance with the opinion of Puspitarini et al. (2019) said that integrating technology-based learning media can significantly increase the motivation and involvement in the learning process. Thus, the use of innovative learning media is an important factor in creating a more effective and interactive learning environment. In addition, technology-supported listening activities can meet various learning needs and preferences, by combining authentic material with interactive elements, making it more possible for students to learn and evaluate independently. (Uzun 2023). argues that technological advances have opened up new avenues to improve listening achievement. Digital media including applications such as ELSA SPEAK, allow for interactive and self-paced practice. Therefore, the researcher tried to conduct a study to improve students' listening achievement using the ELSA SPEAK application.

As explained in the second paragraph, achievement in listening skills is one of the most difficult to master because it requires daily practice. This is reinforced by research conducted by Alzamil (2021). However, with proper training, such as using the ELSA SPEAK application, students can more easily and be motivated to improve their listening skills. Kholis (2021) also revealed that the ELSA SPEAK application has been proven to be able to improve students' achievement in speaking and listening skills in real-time. The various features available in this application help students develop their English skills, especially in the listening aspect.

Several challenges are faced by eleventh-grade students at MA Al-Djufri in listening. First, students rarely engage in listening activities or feel unfamiliar with them due to the infrequent implementation of listening lessons. Second, the lack of learning media, particularly those aimed at enhancing listening skills, results in lower motivation when learning English, especially in listening. Based on these issues, researchers conducted a study on learning strategies using applications that can help address these challenges in English learning, particularly in listening, specifically through the use of the ELSA Speak application.

There are the previous studies, like the one conducted by Nur Fauziah et al. (2024) have explored similar applications of ELSA SPEAK entitled "The Impact of The English Language Speech Assistant (ELSA) Application on Students' Pronunciation Skills." This research highlighted a significant increase in students' pronunciation accuracy after using ELSA SPEAK. This research also demonstrated the application's capability to provide immediate feedback and customized exercises, which increased learners' confidence and competence in articulating

English sounds. Furthermore, Khalizah & Damanik (2024) entitled "ELSA SPEAK: Triggering Demotivated Students to Improve Their Own Pronunciation with an AI-Powered English-Speaking Coach."

This study found that ELSA SPEAK effectively motivated junior high school students to practice their speaking skills. Previous studies just focused more on the application of ELSA SPEAK in improving speaking and pronunciation skills, so there is still a gap in understanding its potential impact on listening achievements. therefore, this study focuses more on students' listening achievements, and how far the correlation between ELSA SPEAK and listening achievement.

This study aims to examine the relationship between the use of the ELSA SPEAK application and students' listening achievement, especially focusing on its listening features. By analyzing this relationship, this study seeks to assess the effectiveness of ELSA SPEAK as a tool to improve listening skills and overcome challenges in learning English.

Method

This study used quantitative research design specifically correlational approach to investigate the relationship between variables. Franzese & Iuliano (2019) stated that Correlation analysis is a statistical technique used to assess the strength and direction of the relationship between two numerical variables. It helps identify whether changes in one variable are associated with changes in another, either increasing or decreasing together.

It helps to determine whether an increase or decrease in one variable corresponds to an increase or decrease in another. In this research the X variable is the use of ELSA SPEAK, and the Y variable is student listening achievement. The population of this research was the students of eleven grade MA Al-Djufri Blumbungan Pamekasan consisting of two classes, it was science (IPA) and social science (IPS), with a total of 44 students. The sample of this research was 26 students chosen by clustering sampling.

The instruments in this study included interview, observation, questionnaire, test, and documentation. Interview were conducted to identify the problems that exist in the listening learning process by interviewing English teacher. In observation the researcher will observe the conditions of class in the student listening learning process. It allows researcher to understand phenomena that occur naturally. In this research, researcher used test and questionnaire to measure the correlation before and after using the ELSA SPEAK application on students' listening achievement. Lastly, documentation is used as a tool to collect data during the administration of the test and questionnaire.

Result

In this study there are two variables, the use of the Elsa Speak application as the independent variable (x) and students' listening achievement as the dependent variable (y). The data presented are based on research conducted at MA Al-Djufri Blumbungan Larangan Pamekasan. Questionnaire and test were used to collect the data in this study. The questionnaire and test each consist of 30 questions. The questionnaire is used to measure the extent of students' listening achievement before using the Elsa Speak application, and the test is used to measure students' listening achievement after using the Elsa Speak application.

3.1 Students' listening achievement

From the tests that have been conducted, it can be seen that the average value of students' listening achievement is 89.62. The middle value is 95. The mode or the value that appears most often is 95. The highest value for the Listening test is 100.00 while the lowest value is 36.00.

Table 1 frequency Data Distribution of student listening achievement

Score range	Classification	Frequencies	Percentage
90-100	Very Good	20	76,92%
80-89	Good	2	7,69%
70-79	Average	2	7,69%
60-69	Poor	1	3,85%
≤50	Very Poor	1	3,85%

3.2. Correlation Analysis

In this study, the researchers used SPSS 17 to analyze the data, by applying the Pearson product-moment formula to determine the relationship between the use of Elsa Speak and students' listening achievement. The measurement criteria are as follows: If the significance value (Sig.) is less than 0.05, the alternative hypothesis (Ha) is accepted. Conversely, if the Sig. value is greater than 0.05, Ha is rejected. In addition, if the correlation coefficient obtained (r) exceeds the critical value (r- table), Ha is accepted; if the r-obtained is lower than r-table, Ha is rejected. The results of the correlation analysis are shown in the table below.

Table 2. The correlation analyzes.

		use of Elsa Speak application	listening Achievement
use of Elsa Speak application	Pearson Correlation	1	.670**
	Sig. (2-tailed)		.000
	N	26	26
listening Achievement	Pearson Correlation	.670**	1
	Sig. (2-tailed)	.000	
	N	26	26

**. Correlation is significant at the 0.01 level (2-tailed).

Based on the result of SPSS above, it can be interpreted in some points such as bellows

a) **Pearson Correlation Coefficient (0.670):**

Elsa Speak and listening achievement appear to be moderately positively correlated, according to the Pearson correlation coefficient of 0.670. Practically speaking, this indicates that students' listening proficiency tends to rise in tandem with the frequency or severity of Elsa Speak. There is a discernible but imperfect correlation, as indicated by the value of 0.670. Although the correlation between the two variables is not extremely strong, it is strong enough to imply that they are connected in a significant way.

b) **Significance (p-value = 0.000):**

This correlation's p-value of 0.000 is significantly lower than the generally accepted significance level of 0.01 (1%). This shows that the correlation is statistically significant, meaning there is a very low probability (less than 0.01%) that this correlation occurred by chance. As a result, the outcome is seen as trustworthy and not the product of chance.

c) **Interpretation of the Results:**

It can be concluded that Elsa Speak use is positively correlated with listening achievement because of the positive and moderate correlation. In other hands, students who utilize Elsa Speak more often typically score higher on listening achievement tests. This result may indicate that using Elsa Speak as a tool or technique to enhance listening abilities improves listening performance. However, as the correlation is not perfect (it is not 1.0), listening achievement may also be influenced by factors other than the use of Elsa Speak. It's crucial to keep in mind that, even though the instrument might have some influence, other factors might also be responsible for the improvement in listening.

Overall, the findings point to a moderate, positive, and statistically significant correlation between enhanced listening skills and Elsa Speak use. However, a more thorough explanation of this correlation might be possible with more study that takes into account other affecting factors and has a bigger sample size.

Discussion

The study findings showed a strong positive correlation between Elsa Speak usage and students' listening achievement, indicating that students who used the app regularly tended to score higher on listening exercises. This is consistent with earlier studies showing how improving pronunciation might improve listening comprehension. (Rost, 2024) asserts that while better pronunciation enables students to identify spoken words more successfully, listening and pronunciation are strongly related. Students can improve their pronunciation with Elsa Speak's AI-driven feedback, which may help them become more accustomed to the English language's sounds and rhythms and improve their listening abilities.

Elsa Speak's interactive features, which let users practice at their own pace and offer tailored feedback, are another crucial factor to take into account. According to (Goh, 2021), technology-assisted language learning resources can improve listening comprehension by providing possibilities for repeated practice and instantaneous corrections. The speech recognition technology from Elsa Speak aids students in distinguishing minute phonetic changes, which is crucial for comprehending spoken English. This lends credence to the notion that programs that emphasize pronunciation may help learners discern sounds more precisely, which may improve listening comprehension in addition to speaking abilities.

Even though this study indicated a positive correlation, it is important to be aware of any potential limitations. Even though Elsa Speak provides systematic pronunciation activities, vocabulary knowledge, exposure to other accents, and contextual awareness are all important components of listening comprehension Field (2009). Improved phonemic awareness may be an advantage for students using Elsa Speak, but in order to develop a well-rounded listening skill, they still need to engage with a variety of listening experiences, including lectures, multimedia content, and real-world discussions. In order to maximize learning outcomes, more research could examine the ways in which Elsa Speak interacts with other listening techniques.

Future research could also investigate the long-term effects of using Elsa Speak on listening proficiency, particularly in comparison to traditional listening exercises. Additionally, experimental studies could be conducted to determine whether integrating Elsa Speak into listening courses leads to measurable improvements in listening test scores. By examining these aspects, educators and researchers can better understand the potential of AI-driven language learning applications in supporting both pronunciation and listening skills.

Conclusion

Based on the research results, it can be concluded that there is a significant positive correlation between the use of the Elsa Speak application and the listening achievement of class XI students of MA Al-Djufri Blumbungan Pamekasan. With a correlation coefficient of 0.670, these results indicate that students who use the Elsa Speak application more often tend to have better listening achievement. This shows the potential of artificial intelligence-based technology as an effective tool to improve students' listening achievement in learning English.

However, this study has several limitations. First, the number of samples used is relatively small, which is only 26 students, so the results of this study cannot be generalized widely to students with different backgrounds. Second, this study only focuses on the relationship between the use of Elsa Speak and students' listening achievement without considering other influencing factors, such as learning motivation.

References

Alzamil, J. (2021a). Listening Skills: Important but Difficult to Learn. Arab World English Journal, 12(3), 366–374. https://doi.org/10.24093/awej/vol12no3.25

Alzamil, J. (2021b). Listening Skills: Important but Difficult to Learn. Arab World English Journal, 12(3), 366–374. https://doi.org/10.24093/awej/vol12no3.25

Bani, M., & Masruddin, M. (2021). Development of Android-based harmonic oscillation pocket book for senior high school students. JOTSE: Journal of Technology and Science Education, 11(1), 93-103.

Educational Technology Program, Universitas Sebelas Maret, Indonesia, tp11010.yanuaridwi@gmail.com, Puspitarini, Y. D., Hanif, M., & Educational Technology Program, Universitas Sebelas Maret, Indonesia, muhammadhanif@student.uns.ac.id. (2019). Using Learning Media to Increase Learning Motivation in Elementary School. Anatolian Journal of Education, 4(2), 53–60. https://doi.org/10.29333/aje.2019.426a

Field, J. (2009). LISTENING IN THE LANGUAGE CLASSROOM. Cambridge University Press.

Franzese, M., & Iuliano, A. (2019). Correlation Analysis. In Encyclopedia of Bioinformatics and Computational Biology (pp. 706–721). Elsevier. https://doi.org/10.1016/B978-0-12-809633-8.20358-0

Goh, C. (2021). Teaching and Learning Second Language Listening Metacognition in Action. Routledge.

Husnaini, H. (2025). Navigating challenges and strategies in implementing the Independent Curriculum: A multi-site case study of English language instruction in junior and senior high schools in Palopo. Linguistics Initiative,

5(1), 178-190.

Khalizah, N., & Damanik, E. S. D. (2024). ELSA Speak: Piquing Demotivated Students to Self-Improve Their Pronunciation with an AI-powered English-Speaking Coach. Elsya: Journal of English Language Studies, 6(1), 92–102. https://doi.org/10.31849/elsya.v6i1.18727

Kholis, A. (2021). Elsa Speak App: Automatic Speech Recognition (ASR) for Supplementing English Pronunciation Skills. Pedagogy: Journal of English Language Teaching, 9(1), 01. https://doi.org/10.32332/joelt.v9i1.2723

Loan, T. T. T., Tuoi, P. T. K., & Hoa, H. T. M. (n.d.). Significance of Listening Skills in Enhancing the Communication Skills.

Masruddin, M., & Abduh, N. K. (2024, May). Indonesian Language Learning for Foreign Speakers Based on Luwu Culture: A Needs Analysis Study. In 4th International Conference on Linguistics and Culture (ICLC-4 2023) (pp. 75-80). Atlantis Press.

Masruddin, Hartina, S., Arifin, M. A., & Langaji, A. (2024). Flipped learning: facilitating student engagement through repeated instruction and direct feedback. Cogent Education, 11(1), 2412500.

Nur Fauziah, Zalzabil Zakiah Aororah, Repi Anjani Ramadhany, & Sitti Maryam Hamid. (2024). The Impact of The English Language Speech Assistant (ELSA) Application on Students' Pronunciation Skills. INTERACTION: Jurnal Pendidikan Bahasa, 11(2), 193–203. https://doi.org/10.36232/interactionjournal.v11i2.26

Padang, A. R. D. N., & Sitepu, M. S. (2023). Utilizing Educational Media in the Field of Education Fosters Active Learning Within the Classroom. Jurnal Pendidikan (Teori Dan Praktik), 8(2), 95–100. https://doi.org/10.26740/jp.v8n2.p95-100

Puspitarini, Y. D., Hanif, M., & Educational Technology Program, Universitas Sebelas Maret, Indonesia, muhammadhanif@student.uns.ac.id. (2019). Using Learning Media to Increase Learning Motivation in Elementary School. Anatolian Journal of Education, 4(2), 53–60. https://doi.org/10.29333/aje.2019.426a

Rost, M. (2024). Teaching and Researching Listening (4th Edition, p. 454). Routledge. Sharma, M. C., & Puri, Dr. S. R. (2020). THE IMPORTANCE OF FOUR BASIC SKILLS IN LEARNING ENGLISH. THE GENESIS, 7(4), 33–36. https://doi.org/10.47211/tg.2020.v07i04.007

Singh, A. R. (2023). If Speaking is Silver, Listening is Gold. International Journal of English Literature and Social Sciences, 8(5), 036–037. https://doi.org/10.22161/ijels.85.6

Sudewi, P. W. (2021). Need Analysis of Listening Skills in the EFL Class at Sulawesi Barat University. IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature, 9(2), 511–520.

https://doi.org/10.24256/ideas.v9i2.2344

Syarani, N. (2024). TRILINGUAL FOLKSONGS BOOK: TRANSLATING TANA LUWU FOLKSONGS INTO AN ENGLISH-INDONESIAN SONGBOOK. English Language Teaching Methodology, 4(3), 428-441.

Uzun, L. (2023). Enhancing Foreign Language Learners' Listening Skills through Technology: A Sample Lesson. Studies in English Language Teaching, 11(2), p23. https://doi.org/10.22158/selt.v11n2p23

Wiraatmaja, T., Sari, L. K., & Cahyadi, P. (2022). How Listening Deemed as The Most Difficult English Skills During Online Learning Among Students? Premise: Journal of English Education, 11(3), 438. https://doi.org/10.24127/pj.v11i3.4969