

## THE EFFECT OF SPOTIFY APPLICATION ON STUDENTS' LISTENING LEARNING

Eriadi Utama<sup>1</sup>, Dian Anggraini Harahap<sup>2</sup>

<sup>1,2</sup>Pendidikan Bahasa Inggris, Universitas Asahan

e-mail: [eriutama674@gmail.com](mailto:eriutama674@gmail.com)

### Abstract

This research aims to determine the significant Effect of Spotify Application on Students' Listening Learning. This research was Quantitative used a Quasi Experimental design. This research was conducted at SMK Negeri 1 Air Joman. The research population was all tenth-class students of SMK Negeri 1 Air Joman for the 2024/2025 Academic Year. The sampling technique used purposive sampling with a total sample of 72 students, namely Experiment Class using Spotify Application and Control Class using conventional media. Data collection instruments include Test, Treatment, and Observations. Before being given treatment, the mean pre-test score in the Experiment class was 73,33 and the Control class mean pre-test score was 75,00. After being given treatment, the mean post-test score for the Experiment class increased by 17,62% to 86,25, while in the Control class was it increased by 10,75% to 83,06. The results of the t-test analysis showed that ( $H_a$ ) was accepted with a value of  $t_{\text{count}} > t_{\text{table}}$  or  $2,996 > 1,669$  at the level significant 10% or 0,10 and sig.  $0.004 < 0.05$ . Thus, there was a Effect of Spotify Application on Students' Listening Learning at Tenth Grade SMK Negeri 1 Air Joman.

**Keywords:** *Spotify Application, Listening Learning*

### INTRODUCTION

Language is structured system of communication that consists of grammar and vocabulary. It is the primary means by which humans convey meanings, both in spoken and written forms, and may also be conveyed through sign languages. There are four aspects of learning English, it consists of writing, reading, listening and speaking. The integration of listening and speaking with reading and writing will make students good listeners, speakers, readers and writers so as to be able to communicate effectively (On Students' Ability in Listening at Vocational, 2023). Four language skills constitute a system in which the four skills interweave and integrate. English means belonging or relating to England, or to its people, language, or culture. It is also often used to mean belonging or relating to Great Britain, although many people object to this. Song is a short metrical composition intended or adapted for singing, especially one in rhymed stanzas; a lyric; a ballad.

a musical piece adapted for singing or simulating a piece to be sung: Mendelssohn's "Songs without Words."

In language learning, listening is an essential element because listening is the key to speaking, and beyond that, reading and writing. Listening is the most important of all and it has an important role in the communication process (Brian et al., 2019). It means that, listening has an important role in order to acquire a language. Especially at work, listening skill is used at least three times more than speaking, and four to five times more than reading and writing. Listening is a very common activity in everyday life, we listen to many different things every day, whether it's a conversation with someone, from listening to the news on TV, listening to music, and listening to other things.

Listening is an active process where listening aims to understand every meaning of what has been heard. The four language skills are categorized into two categories: receptive and productive. Speaking and writing skills fall into the productive category. While listening and reading skills fall into the receptive category. Of these two skills, reading and listening are often compared. Although both have some similarities, there are two factors that distinguish them. First, listening usually occurs in real-time, meaning that listening must be understood immediately, because in listening there is no repetition, only if the listener asks the speaker to repeat it. The second factor is that listening usually occurs in conversation and of course requires a productive verbal response.

Application is an application, storing things, data, problems, work into a medium or media that can be used to implement or implement existing things or problem so that is changes into a new from without eliminating values that basis of terms of data, problems, and the work itself. So the application is a transformation of a problem or work in the form of things that are difficult to understand to be simpler, easier and can be understood by users. So that with the application, a problem will be helped more quickly and precisely.

Spotify is one of popular application within the world. Spotify is one of advanced music, podcast, and video spilling benefit that gives the audience get to to millions of melodies and other substance from craftsmen all over the world. Spotify application has a few highlights like computerized music, podcast and video gushing. In computerized music, clients can play their favorite melody in that application. Podcast itself have much computerized English story that curiously to listen and video gushing too can utilize as a learning media by observing video. In this research, listening is defined as the ability to prepare the data heard and be able to relate it to other known data.

## **METHOD**

The research was conducted at SMK Negeri 1 Air Joman on October – November 2024/2025, which located on Jl. Perjuangan, Punggulan, Air Joman

District, Asahan Regency, North Sumatra. The population of this research included tenth grade students at SMK Negeri 1 Air Joman in 2024/2025 academic year.

**Table 1 Number of Population**

Classes	Students
X TSM-1	36
X TSM-2	36
X TKRO	36
X TPL	36
X RPL-1	36
X RPL-2	36
X RPL-3	36
Total	252

*Source: SMK Negeri 1 Air Joman (2024)*

In this research uses the Slovin formula because in sampling, the number must be representative so that the research results can be generalized and the calculation does not require a sample number table, but can be done using simple formulas and calculations.

$$n = \frac{N}{1 + N(e)^2}$$

Which:

$n$  = Number of sample

$N$  = Total population

$e$  = 0,1 Error tolerance limit (10 % -20%).

In the Slovin formula there are the following provisions:

The value of  $e$  = 0.1 (10%) for large populations.

The value of  $e$  = 0.2 (20%) for small populations.

So, the sample range that can be taken from the Slovin technique is between 10 – 20% of the population.

$$n = \frac{N}{1 + N(e)^2} = \frac{252}{1 + 252(0,1)^2} = \frac{252}{1 + 252(0,1)} = \frac{252}{3,52} = 71,59$$

$n = 72$  Students

Based on the Slovin formula above, the sample used in this research was 72 students with an allowance for sampling error of 10%. In this research, the researcher used purposive sampling. Purposive sampling is one of the nonprobability sampling methods.

The researcher selected two class as a sample because, based on observations and interviews with students and English teachers at SMK Negeri 1 Air Joman, this class is brighter and more active than the other class.

**Table 2 Sample of The Research**

Classes	Students	Variable
X RPL-1 (Experimental Class)	36	X
X RPL-2 (Control Class)	36	Y

Which one:

X: Using Spotify Media

Y: Using Conventional Media.

This research investigation had two variables: the independent variable (represented by "X"), which was the usage of Spotify, and the dependent variable (represented by "Y"), which was the students' listening.

**Table 3 Research Design**

Classes	Type	Treatment	Type
X RPL-1 (Experimental Class)	Pre Test	X	Post Test
X RPL-2 (Control Class)	Pre Test	Y	Post Test

Researchers prepare everything required to carry out this action. At this point, researchers conduct the following activities:

1. Conduct early observations to identify concerns by interviewing teachers and class X students.
2. Create a learning implementation plan (RPP) based on a syllabus that aligns with the Basic Competencies (KD) and an observation sheet.
3. Create speaking test questions in oral form that will be administered to students to measure their level of listening learning on descriptive listening material using Spotify.

#### 4. Develop evaluation tools.

The data was collected after the students completed the pre- and post-tests, and it was analysed to compare the mean scores of the experimental group's students to those of the control group's students before and after treatment. This analysis was carried out to determine the effect of YouTube video learning media in the research. The t-test uses the following formula:

$$t = \frac{M_x - M_y}{\sqrt{\left(\frac{Da^2 + Db^2}{N_x + N_y - 2}\right) + \left(\frac{1}{N_x} + \frac{1}{N_y}\right)}}$$

Notes :

$M_x$  : Mean of Experiment

$M_y$  : Mean of Control

$Da^2$  : Std Deviation value of the experimental

$Db^2$  : Std Deviation value of the control

$N_x$  : Samples of the experimental class

$N_y$  : Samples of the control class.

## RESULTS AND DISCUSSION RESULTS

This chapter provided the study findings dealing with data analyzed and examined, which were gathered from the stated Pre-Test and Post-Test of two classes, Experimental and Control. This section contains statistically analyzed and tabulated data. It discussed students' pre-test and post-test scores, as well as their categorization and mean and standard deviation.

***Table 4 The Differences Score Between Pre-Test and Post-Test Experiment Class***

No	Students	Pre-Test	Post-Test
1	Abel LR	70	85
2	Aira R	65	85
3	Alisa A	70	80
4	Anggi R	60	85
5	Anisa M	75	85
6	Arcynthia S	75	90
7	Atika SW	75	85

8	Dea S	75	80
9	Dewi L	70	85
10	Dwi DS	75	85
11	Emy DN	75	90
12	Fitri Y	80	85
13	Ika A	80	90
14	Intan N	75	85
15	Laila S	70	95
16	Maylinda	85	95
17	Melda L	60	85
18	Miranda	75	85
19	Nabela A	80	90
20	Naisyila A	75	85
21	Nazwa A	75	80
22	Nindy SA	70	85
23	Nur M	75	80
24	Nurjannah	75	90
25	Putri F	70	80
26	Putri Olivia	80	90
27	Putri Permata S	85	95
28	Rahma T	75	90
29	Rania A	80	85
30	Rindy L	75	85
31	Sariana	65	90
32	Shintia D	75	85
33	Sindy A	60	85
34	Suci K	70	90
35	Tiara FD	70	80
36	Yolanda S	75	85
Total		$\Sigma = 2640$	$\Sigma = 3105$
		M = 73,33	M = 86,25

**Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pretest	36	60	85	2640	73,33	6,094
Posttest	36	80	95	3105	86,25	4,205

Valid N (listwise)	36					
--------------------	----	--	--	--	--	--

Based on the above data, students in the experiment class scored lower on the pre-test than on the post-test. The mean of student score was 73,33 with Std Deviation 6,094 on the pre-test, and after receiving Spotify treatment, it ascended to 86,25 with Std Deviation 4,205 on the post-test.

***Table 5 The Differences Score Between Pre-Test and Post-Test Control Class***

No	Students	Pre-Test	Post-Test
1	Aditya A	65	85
2	Aira A	75	80
3	Allia P	80	85
4	Anggeriyani	75	80
5	Annisa AZ	80	85
6	Anzas TA	75	80
7	Azzahra SA	80	90
8	Deswita M	75	80
9	Dio F	70	75
10	Eka AF	80	85
11	Erika DP	75	80
12	Fahri ND	80	85
13	Febri TA	75	90
14	Hafiza I	65	80
15	Indah AP	75	85
16	Intan U	80	95
17	Kayla P	75	80
18	Lusi A	80	85
19	Meilisa P	75	80
20	M. Uwais AS	75	80
21	M. Alqodri P	60	85
22	M. Raditya A	80	85
23	Nadia F	75	95
24	Natasya W	60	80
25	Nazwa NP	75	80
26	Nisa AB	80	85
27	Nur SF	85	90
28	Nurul A	75	80
29	Putri L	80	85
30	Rama R	75	80
31	Riva A	80	85

32	Sellin AP	70	75
33	Silfa A	75	80
34	Siti NA	80	85
35	Syafa D	65	75
36	Widia W	75	80
Total		$\Sigma = 2700$ M = 75,00	$\Sigma = 2990$ M = 83,06

**Descriptive Statistics**

	N	Minimum	Maximum	Sum	Mean	Std. Deviation
Pretest	36	60	85	2700	75,00	5,855
Posttest	36	75	95	2990	83,06	4,822
Valid N (listwise)	36					

Based on the above data, students in the control class scored lower on the pre-test than on the post-test. The Mean of student score was 75,00 with Std Deviation 5,855 on the pre-test, and after receiving conventional treatment, it ascended to 83,06 with Std Deviation 4,822 on the post-test.

**Table 6 Independent Sample T-Test****Independent Samples Test**

		Levene's Test for Equality of Variances		t-test for Equality of Means					
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference Lower Upper
Equal Result variances assumed		,797	,375	2,996	70	,004	3,1944	1,0663	1,0678 5,3211



Equal variances not assumed			2,996	68,725	,004	3,1944	1,0663	1,0671	5,3218
--------------------------------------	--	--	-------	--------	------	--------	--------	--------	--------

According to Singgih Santoso (2014: 265), the following are the rules for making decisions in the independent sample t-test based on the significant value (Sig.) of the SPSS 23 output data:

If **Sig. (2-tailed) > 0,05**.  $H_0$  accepted

If **Sig. (2-tailed) < 0,05**.  $H_a$  accepted

Based on the table above  $t_{count} = 2,996$ . So,  $t_{count} > t_{table}$  or  $2,996 > 1,669$  and sig.  $0,004 < 0,05$ . So,  $H_a$  is accepted and  $H_0$  is rejected, the hypothesis there is any significant Effect of Spotify Application on Students' Listening Ability at Tenth Grade SMK Negeri 1 Air Joman.

## DISCUSSION

According to the research findings, student's' listening abilities improved in the experimental class that used the Spotify application. The mean score was 86.25. The control class, on the other hand, had a mean score was 83.06. It might be described as helping students increase their listening scores by applying the Spotify application.

The "Independent T-Test" output table above shows that  $t_{count} = 2,996$ . So,  $t_{count} > t_{table}$  or  $2,996, > 1,669$  with sig.  $0,004 < 0,05$ . So, based on the above decision-making requirements it is possible to conclude that  $H_0$  is rejected while  $H_a$  is accepted. As a result, the Spotify application has significant effect on the listening ability of tenth-grade students at SMK Negeri 1 Air Joman.

## CONCLUSION

In this part, from data and results described on previous chapter, the researcher concluded that using Spotify Application for teaching students with listening may influence their learning in Tenth Grade at SMK Negeri 1 Air Joman. It seems that the mean score of the Experimental Class was 86,25, and the Control Class was 83,06, shows that there was significant Effect of Spotify Application on Students' Listening Learning at Tenth Grade SMK Negeri 1 Air Joman In 2024/2025 Academic Year.

During the learning process, students responded very well when giving answer on the results of song from Spotify in listening activities in the class. This can be seen from the way they hearing and the confidence of each student's

participation. It was found that teaching listening using Spotify Application was able to increased students learning during the learning process.

## REFERENCES

- Anderson, A.; Maystre, L.; Anderson, I.; Mehrotra, R.; and Lalmas, M. 2020. Algorithmic effects on the diversity of consumption on spotify. In Proceedings of the web conference 2020, 2155–2165.
- Aral, S.; and Nicolaides, C. 2017. Exercise contagion in a global social network. *Nature communications*, 8(1): 14753.
- Bailey, N. T.; et al. 1975. The mathematical theory of infectious diseases and its applications. Charles Griffin & Company Ltd, 5a Crendon Street, High Wycombe, Bucks HP13 6LE.
- Bond, R. M.; Fariss, C. J.; Jones, J. J.; Kramer, A. D.; Marlow, C.; Settle, J. E.; and Fowler, J. H. 2012. A 61-millionperson experiment in social influence and political mobilization. *Nature*, 489(7415): 295–298.
- Cencetti, G.; Contreras, D. A.; Mancastroppa, M.; and Barrat, A. 2023. Distinguishing simple and complex contagion processes on networks. *Physical Review Letters*, 130(24): 247401.
- Centola, D. 2010. The spread of behavior in an online social network experiment. *science*, 329(5996): 1194–1197.
- Ramadhani, Fitri. 2010. Improving Students' Listening Comprehension Ability Through English Song ( A Classroom Action research at the Second Year of SMA Negeri 2 Sengkang). Makassar: Muhammadiyah University of Makassar
- Sugiyono, P. D. (2019). *Metode Penelitian Pendidikan (pendekatan kuantitatif, kualitatif, dan R&D)* (24th ed). Alfabeta.
- Syahputra, Zepri. (2024). The Effect of YouTube Media Learning on Students' Difficulties Speaking English at Tenth Grade. *Journal of English Education and Linguistics*. Vol. 2 No. 2, Juli 2024, p. 148 – 158.
- UTARI, S. D. (2023). THE EFFECT OF USING SONG THROUGH SPOTIFY APPLICATION ON STUDENTS' ABILITY IN LISTENING AT VOCATIONAL HIGH SCHOOL TARUNA PEKANBARU (Doctoral dissertation, UNIVERSITAS ISLAM NEGERI SULTAN SYARIF KASIM RIAU).
- Wulanda, W. (2023). The Effect Of Spotify Application On Students' Listening Comprehension (Doctoral dissertation, State Islamic University of North Sumatera).