



The Effectiveness of PowToon Towards Junior High School Students' Reading Skills

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ABSTRACT

The purpose of this study is to investigate the effectiveness of using PowToon toward junior high school students' reading skills. The quantitative method with a quasi-experimental posttest only control group design. The data was analyzed using statistical and inferential analysis through SPSS to get the score. Therefore, the student's score was used to compare those two groups' reading skills. The sample of this study was 80 students at SMPN 4 Singaraja who were divided into two groups within one group consisting of 40 students. The collection of data was being collected through a post-test. The result of the study showed that the score of the group who received treatment in this study had significant differences compared with the group who did not use PowToon in the learning process. Furthermore, the data collection was tested using an independent sample t-test in order to know whether the use of PowToon has a significant effect or not. After conducting the test, the result showed that the sig. (2-tailed) was smaller than the alpha level ($\alpha = 0.05$) in which the result of the test was sig. (2-tailed) 0.000. It can indicate that a significant effect related to the use of PowToon can help the students affect their reading skills. In addition, the use of PowToon was highly recommended use in affecting the students' reading skills because it has a significant effect on the students and also this tool can make the activity of the learning process be more efficient, entertaining, interesting, and enjoyable.

Keywords: reading skills, Powtoon, junior high school students



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ISSN 2655-9722, DOI: 10.30650/ajte.v5i2.3660

1. INTRODUCTION

1.1. Introduction

Reading is one of the necessary English basic abilities, according to Ismail et al., (2017). Reading skills are important because they help students improve their vocabulary, which leads to

improved writing and speaking. Reading skills can also assist learners in grasping the knowledge or point of anything they read. They will have critical thinking abilities since they have read and learned something new from what they have read. It might be literary work, newspapers, or any number of other things. When learners lack reading abilities, it is difficult to gain other skills because all of the core English skills are interconnected. Furthermore, reading skills can be difficult to acquire because we must comprehend the purpose behind the text or literary work that we read. This is why reading skills are very complicated because we must know the word for each sentence, referred to as the vocabulary, and then the meaning of it, followed by the sentence's structure and so forth.

Computer-Assisted Language Learning (CALL) is a subset of information and communication technology (ICT). CALL is the phrase used when a teacher implements technology in an English language learning activity. Many teachers and lecturers use technology to improve learning results at all educational levels, from elementary to advanced. The range of techniques will allow students to acquire language more generally since they will be able to search for materials or things that they do not understand on the internet. CALL allows students to learn in a variety of modalities, particularly while learning English. Wiraningsih & Santosa (2020) claim that students should participate more in the learning process, as well as use their critical thinking and problem-solving abilities. (Febrianto et al., 2020) feel that using technology may pique students' attention and is an excellent technique to keep students motivated in online learning. Indonesia is one of the nations that use ICT in traditional learning. As a result, Hafeez, (2021) claims that traditional learning may now be coupled with the use of ICT tools to improve the efficiency of the teaching process.

Rochman (2018) claims that the intention of learners and educators to master Basic English skills has reduced during the rapid growth of technology. They are uninterested in learning languages correctly, particularly the fundamental English abilities required to understand English. Saraswati et al., (2021) state that many students still have difficulties learning Basic English abilities.

In this instance, the writer believes that the teacher might find an appropriate solution to the issue. According to Febrianto (2020), using Information and Communication Technology (ICT) tools in EFL instruction is one of the finest ways to grasp students' English skills, particularly reading skills. PowToon is an excellent tool that may be utilized in English learning

activities to improve students' reading abilities. PowToon is a web-based program that allows you to make animated video presentations with various media sources, images, cartoons, and animated photos, according to Seeman et al. (2018), as referenced by Anita and Kardena (2021). PowToon may provide instructional material to teachers, and learners can be encouraged to improve their academic performance.

As a result, the author discovered that some study has been undertaken to determine the efficiency of employing ICT tools, particularly PowToon, in learning activities. It can be stated that various researchers investigated the influence of PowToon in the field of English as a foreign language, but not specifically in reading abilities. In addition, the author desired to undertake this study using the same theory but in various situations and approaches, primarily to see whether there is an effect of incorporating PowToon on students' reading skills.

1.2. Research questions

This study aimed to investigate whether there are any differences in students' test results of implementing PowToon on students' reading skills. Later, it is also aimed to see if the difference is significant or not.

1.3. Significance of the study

The author hopes that this study will be theoretical and practically beneficial. From the theoretical point of view, the author hopes that this study will give further information concerning the usage of PowToon in improving students' reading skills. Practically, the author expects that this study could be beneficial for students and teachers as a result of a new style of learning. Meanwhile, the author also hopes the result of the study could add new information and value for future research, practically.

2. METHOD

2.1. Research Design

To examine the impact of implementing PowToon in EFL on the students' reading skills at SMPN 4 Singaraja, the author used a quantitative method where the quasi-experimental non-equivalent control group design was used, Creswell (2014). As a result, this approach is appropriate for this research since it will investigate the impact of PowToon implementations on students' reading skills. Furthermore, the efficiency of PowToon implementation on students' reading skills will be tested through an experiment in which two groups were identified as an experimental group, which means they will get treatment, and a control group, which means they

will not receive treatment. In addition, the author will give the treatment to an experimental group and end up with a post-test for both groups. Then, the data will be gained from the post-test and a comparison will be made between these two groups.

2.2. Samples/Participants

This study is being carried out in SMPN 4 Singaraja in Sambangan village, Sukasada sub-district, Buleleng regency, Bali. Because the author only did this research in the seventh grade, the population of this research consisted of 418 students. They were separated into 11 different classes. The researcher used the sampling technique for the quantitative method to obtain a sample from the population without sacrificing the quality or qualities that the researcher requires. One-stage simple random sampling in this situation was used, where the writer chose the sample directly, Creswell (2014). There will be both experimental and control groups. Because this study used simple random sampling, the author includes a lottery to choose which groups belong to the experimental and control groups. After finding the two groups, it can be concluded that each group contains 40 students. The normality and homogeneity test to check whether the samples are homogenous and normal was already done before the treatment was given.

2.3. Instrument

Since the purpose of this study is to determine whether there is a significant difference or influence on students' reading skills by incorporating PowToon, multiple-choice reading tests will be given as the post-test at the end of the treatment. In addition, before the author gives the to both of the groups, the author checks the content validity where the test was checked by professionals followed by empirical validity where the author gives the test to the other class in terms of how many questions are compatible. For content validity, the Gregory formula was used to calculate the result of the content validity. After testing both experimental and control were assessed to answer the multiple-choice reading test which consisted of 23 questions that related to the material that the author gave. The score of the post-test was used as the main data for this study.

2.3.1. Instrument Validity

In this study the author conducted two kinds of validity. The first one is content validity. The reading test is subjected to content validity testing to determine the instrument's reliability in

assessing the notion under consideration. As a result, the reading test is evaluated by two experts. The first table discusses the reading test's content validity.

Table 1. Content Validity of Reading Test

		Judge I	
		Irrelevant	Relevant
Judge II	Irrelevant	A	B
	Relevant	C	D = 40

- A = Both judges are not relevant
- B = First judge is relevant, second judge irrelevant
- C = First judge irrelevant, second judge relevant
- D = Both judges are relevant

After the test that included 40 multiple-choice questions was being judged by the experts, Gregory's formula was used to calculate the result of reading test judgment.

Formula 1 Gregory' Formula

$$Content\ Validity = \frac{40}{0 + 0 + 0 + 40} = 1$$

Therefore, the calculation result's score is one, in which the scale of the content validity is high according to the content validity criteria below.

Table 2. Criteria of Content Validity

Scale	Level
0.8-1	Very High
0.6-0.79	High
0.40-0.59	Average
0.20-0.39	Low
0.00-0.19	Very Low

The researcher must then conduct empirical validity tests. Empirical validity is crucial since it determines whether the instrument that will be employed is adequate. Furthermore, the researcher evaluated the instrument, which is a reading test, on a class of 40 students at SMP N 4

Singaraja. The researcher's class is separate from the control and experimental groups; thus, the students are classified as non-samples. After gathering the outcomes, Anates V4 was used to analyze the empirical validity of the reading test. The correlation coefficient of item validity was calculated using Anates' results, showing that 23 of the 40 questions are classified as having excellent validity. As a result, the researcher opted to eliminate the questions with low validity quality.

2.3.2. Test Reliability

The Alpha-Cronbach level, as implemented by Anates V4, will be utilized to assess instrument reliability.

Table 3. Alpha Cronbach Measure

Cronbach Alpha Criteria	Classification
$a \geq 0.9$	Very good
$0.8 \leq a < 0.9$	Good
$0.7 \leq a < 0.8$	Be accepted
$0.6 \leq a < 0.7$	Doubtful
$0.5 \leq a < 0.6$	Bad
$a < 0.5$	Not acceptable

It can be seen in the table below that the test of this study is having a very good reliability measurement according to alpha Cronbach criteria.

Table 4. Reliability of the Reading Test

Reliability Result	
Cronbrach Alpha's Scale	Number of Items
0.92	23

2.3.3. Independent Sample T-Test

To know the comparison of the two groups' mean scores, the independent sample t-test was used, Gerald (2018). The independent sample t-test was conducted to investigate the statistically significant differences between the two groups. SPSS v19 was used due to the analysis of the independent t-test.

2.3.4. Effect Size Test

. The intensity of the experimental influence is measured as effect size. The sturdier the connection between the two variables, the larger the effect size (Cohen, 1998). As a result, the author examined the effect size computed in the online calculator that calculates the mean score and standard deviation from two groups to know the scale of the effect size that can be calculated through a web calculator. Cohen's d 's scale is an appropriate effect size test for two groups with identical standard deviations and sample sizes.

2.4. Data analysis

To analyze the data, the author used SPSS to generate simplified outcomes. Therefore, the author also calculated the normality, homogeneity, and an independent t-test to determine whether or not there are differences between the two groups.

2.5. Statistical Hypothesis

In this study, the author have two hypothesis in which if the result of the t-test lower than α (0.005), it will indicates that there is a significant effect of implementing PowToon on students reading skills (H_1). Meanwhile, if the t-test's result higher than α (0.005) it indicates that there is no significant effect of implementing PowToon on the students' reading skills (H_0).

3. FINDINGS AND DISCUSSION

3.1. Findings

Post-test was delivered to an experimental group, a group that received the treatment, and a control group in which the researcher performed the traditional learning process. There are also 23 questions that will measure the students' reading skills. The post-test session was held for 45 minutes. After collecting post-test responses from both groups, the researcher analyzed the data in SPSS v.19 using descriptive and inferential statistics.

Descriptive Analysis

According to Kaur et al. (2018), descriptive statistics is the collection of brief descriptive values into a set of data that reflects a representative of the entire population or a sample. The prime objective is to provide an overview of the samples and measurements collected throughout a study. Descriptive statistics, when paired with multiple visual analyses, are an important component of any quantitative data study. As a result, descriptive analysis reveals the mean, median, mode, variance, range, and standard deviation.

Table 5. The Descriptive Analysis Of The Post-Test

	Experimental Group	Control Group
Valid	40	40
Missing	0	0
Mean	68.02	53.90
Median	71	56
Mode	73	34
Std. Deviation	16.145	17.297
Variance	260.692	299.221
Range	57	65
Minimum	34	21
Maximum	91	86

As a result, obtained from table 5, the experimental group's mean is 68.02, whereas the control group's mean is 53.90 which indicate that the experimental group gain bigger score rather than the control group. The median is the middle score obtained by arranging the collection of data depending on the value. The experimental group's median is 71.00, whereas the control group's median is 56.00 which has 25.00 points as a gap. The mode of a data set is defined as the most often occurring integer in the set. The experimental group has a mode of 73, whereas the control group has a mode of 34. Standard deviation also illustrates the amount of variation from the mean. The experimental group's standard deviation is 16.145, whereas the control group's standard deviation is 17.297. The degree of fluctuation between the scores is referred to as variance. The experimental group has a variance of 260.692, whereas the control group has a variance of 299.221. Range shows how much difference there is from the average. The experimental group's range is 57.00, whereas the control group's range is 65.00. The lowest score in a piece of data is referred to as the minimum. The experimental group's minimum score is 34.00, whereas the control group's minimum score is 21.00. Maximum refers to the highest score in a set of data. The experimental group's maximum score is 91.00, whereas the control group's maximum score is 86.00.

Inferential Analysis

Based on the data, inferential statistics are utilized to draw conclusions and make predictions. Inferential statistics can be used after collecting data from a sample to learn about the larger population from which the sample was derived. The findings of hypothesis testing show inferential statistics, according to Zhang et al (2018).

Normality Test

The normality test is used to verify whether the data is evenly distributed. The researcher utilized the SPSS v.19 tools to determine the data's normality. According to Pallant (2007), the Saphiro-Wilk test was utilized in this exam because the sample size was fewer than fifty students. If the normality test result is more than 0.05, the data is regularly distributed; if the normality test result is less than 0.05, the data is abnormal. The normality test results are shown in the table below.

Table 6. The Result of Normality Test After the Treatment

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Kelas Cempaka	.121	40	.143	.948	40	.062
Kelas Melati	.125	40	.116	.963	40	.212

a. Lilliefors Significance Correction

According to the table above, the normalcy for both groups is more than 0.05, indicating that the data is normal.

Homogeneity Test

The homogeneity test was the next step that the author took. This test is being carried out to determine whether or not the data is homogeneous. The data is considered homogeneous if the test result is more than 0.05; if the result is less than 0.05, the data is not homogeneous. The significance in the table below indicates that the result is more than 0.05, indicating that the data was homogeneous.

Table 7. The Result of Homogeneity Test After The Treatment

Test of Homogeneity of Variances			
Hasil Post-Test			
Levene Statistic	df1	df2	Sig.
.312	1	78	.578

Independent Sample T-test

Because the results of the normality and homogeneity tests are greater than 0.05, the data is parametric. The Independent Sample T-Test is a parametric test used by the researcher. Gerald (2018), states the independent samples t-test is applied to contrast two groups whose means are unrelated. The independent sample t-test determines if there is a statistically significant difference in mean scores between the two groups. This test yields a satisfactory result if the 2-tailed significance value is less than 0.05. If the significance level is greater, there is no meaningful difference between the control and experimental groups.

Table 8. The Result of Independent Sample T-Test After the Treatment

		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	
Hasil Post-Test	Equal variances assumed	.312	.578	3.775	78	.000	14.12500	3.74136	6.67652	21.57348
	Equal variances not assumed			3.775	77.632	.000	14.12500	3.74136	6.67596	21.57404

According to the table, the significant 2-tailed is less than 0.05, indicating that the alternative hypothesis (H_1) is accepted and the null hypothesis (H_0) is rejected. Aside from the difference between the two groups, the researcher must also consider how large the influence is in making the difference between the two groups. The magnitude of the experimental influence is measured as effect size. The stronger the correlation between the two variables, the larger the effect size (Cohen, 1998). According to the calculation, the result was 0.8, indicating that utilizing PowToon had a large impact on students' reading skills at SMPN 4 Singaraja.

3.2. Discussion

The goal of this research is to investigate the influence of PowToon on the reading skills of seventh-grade students at SMP Negeri 4 Singaraja. In the SPSS application, descriptive and inferential statistics were used to analyze the data. Based on the descriptive statistics, the experimental group's reading score is greater than the control group, which was taught without the usage of PowToon. The post-test score also supports it. According to the inferential statistics study, there are substantial disparities between these two groups. The significance 2-tailed of the independent sample t-test was 0.000, which indicates it was less than 0.005. This suggests that using PowToon makes a difference in the learning activity. Furthermore, the effect size analysis reveals that the score is 0.84. The effect size test is used to determine how substantial the

difference is after the researcher employs PowToon in the EFL learning activity on the students' reading skills.

Aside from descriptive and inferential statistical analysis, which shows that using PowToon has a substantial influence on students' reading ability, this experimental study is also backed by a theoretical and empirical review. PowToon, Fitri (2022), assists students in comprehending linguistic qualities, identifying factual or specific information, and establishing the moral worth of any book, particularly English literature. Arwati (2022) identified PowToon to be an appealing item to use in the learning and teaching process.

The author has shown that PowToon can help students affect their reading skills. During the research, the author monitors the students' behavior while delivering the treatment in a small group. The author can detect gains in students' reading skills from the learning activities. When the author asks those many questions regarding the animation video that they developed, they can answer them properly. In addition, this observation is also supported by several studies that have already been conducted before by (Raditya, et al., 2022), (Anita, et al., 2021), (Yuliantini, 2021), (Ningsih, 2021), (Adnyani, et al., 2020), and (Oktaviani, et al., 2020). That study indicates that using PowToon in teaching English is more efficient and interesting than the conventional teaching process.

Based on prior studies and findings, it is reasonable to conclude that PowToon provides various benefits for students, notably as a platform for improving students' reading skills. This study's findings also confirm PowToon's usefulness in improving students reading skills. A previous study has demonstrated that promoting and improving PowToon has a significant influence on students' reading skills. Furthermore, hypothesis testing confirmed that the alternative hypothesis affected the speaking abilities of eight students at SMP Negeri 4 Singaraja.

3.3. Implication

The goal of this study was to use a quasi-experimental technique to investigate the influence of PowToon on seventh-grade students' reading skills. The author had already set in place the methods of the study from the previous chapter. As part of the experimental research, the author presents concepts from previous studies to reinforce the analogous study about PowToon in reading skills. According to the study's findings, based on what the author intended from this study, the results of the quasi-experimental research were effectively implemented.

This study was separated into two classes, one experimental and one control. The researcher gave each group a different therapy. The experimental group was treated with

PowToon during the learning process, whereas the control group was treated with the traditional learning procedure. The researcher begins by introducing himself throughout the learning process and explaining how to use PowToon and its possibilities. Many students are still unsure how to utilize PowToon. As a result, the researcher will be required to explain and show this technique. Second, because each meeting lasted around 90 minutes, there was insufficient time for all students to deliver their PowToon cartoon video. Students who were unable to present their presentations at the last meeting should post them on YouTube. Furthermore, the author also suggests future research to investigate how the students feel while using PowToon in their learning process to get more precise information.

4. CONCLUSIONS

4.1. Conclusion

According to the description above, the usage of PowToon to improve seventh-grade students' reading skills at SMPN 4 Singaraja had a substantial impact. The descriptive and inferential statistical analyses back up this claim. According to descriptive analysis, the experimental group's mean score was greater than the control group's mean score. It might imply that students who study using PowToon do better than pupils who do not receive the therapy. Furthermore, the outcome of the inferential statistical analysis using the independent sample t-test shows that the significance 2-tailed is less than 0.05, indicating that the Hypothesis is accepted. This implies that including PowToon in their learning process has a substantial impact.

According to the observation during the learning process that the author did, it can be seen that the students who are taught using PowToon in their reading activity seem more excited and interested in the animation video that the author used to deliver the material. This has happened because this platform will convert the PowerPoint presentation into an engaging movie or comic that includes the teacher's explanation. The teacher can empower the use of audiovisuals in PowToon, which can increase student concentration and excitement since they can see and hear the subject. Hence, the students also gain knowledge easier rather than having to read a long text. A greater grasp of teaching will make it simpler for students to achieve the goals that the instructor has previously established.

As explained above, it can be concluded that PowToon can be used in teaching reading to junior high school students and has a significant effect on their reading skills. It can be shown from the findings in both the descriptive and inferential statistics that there is a large significant effect of using PowToon.

4.2. Suggestions

According to the findings of the research, the researcher may provide recommendations for all the substance that have relation with this study. The first is for school. As a result of this study, schools may anticipate adopting new types of technology, namely resources and appropriate learning platforms that can also be utilized in other courses. For students, the author expects that this study would be useful to teachers who want to include ICT in their EFL learning process. This research may also be able to assist teachers in varying their teaching activities, particularly when teaching reading. For the teacher, the author expects that this study would be useful to teachers who want to include ICT in their EFL learning process. This research may also be able to assist teachers in varying their teaching activities, particularly when teaching reading. Meanwhile for future research, the author expects that this study will serve as a fresh resource for future academics interested in applying the same theory or technologies. Furthermore, the researcher believes that future researchers would investigate not just the tools, but also the students' responses to utilizing the tools throughout the learning activity to publish more fascinating and precise results than previously.

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