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THE EFFECT OF QUIZIZZ APPLICATION IN READING COMPREHENSION TOWARD THE SECOND GRADE STUDENTS AT SMP NEGERI 1 TELLU SIATTINGE

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Abstract: *This research purposed to investigate some impacts of the Quizizz application in reading comprehension at Junior High School students and selected a quantitative approach by using quasi-experimental method. Nonrandomized experimental group and control group design were applied in this research. Some participants were the second grade students at SMP Negeri 1 Tellu Siattinge. The instrument selected pre-test and post-test in experimental and control groups in the part of reading tests toward students. Then the result appeared the mean score of pre-test in the experimental group was 63.61, and the control group was 63.65. While the mean score of post-test in the experimental group was 82.84, and the post-test of the control group was 75.61. The independent sample t $_{test}$ analysis of post-test from both classes showed the value of significance (2-tailed) was 0.000, while the mean of Sig. (2-tailed) was lower than 0.05. This result showed that H_1 was accepted, and H_0 was rejected. The researcher inferred that there was an improvement to the ability of students for reading comprehension through Quizizz application.*

INTRODUCTION

Quizizz application was one of an online learning media used in the classroom to be exciting learning. Quizizz was a fun multiplayer game platform and application of classroom activity for quiz games where some students became the controller of their face game activity in the classroom (Basuki & Hidayah, 2019).

The effect of online Quizizz application as a learning resource allowed students to participate actively in their learning processes by self-assessing progress instantaneously on computers, tables, or mobile phones. So, the effects of their perceptions did online Quizizz on students' scores in those Quizizz and in their examinations were examined (Meo & Martí-Ballester, 2020).

In addition, for doing Quizizz application, the students needed reading comprehension. Reading comprehension was one of the four basic skills in English, and this was also a way that learners were required to master if they wanted to learn a foreign language. In reading English, it could improve the reader's perception to give a lot of help to improve speaking,

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listening, and writing in knowledge, vision and interest, especially reading because it was the hardest skill. So it was important to do a lot of reading English (Richards & Renandya, 2002).

Reading comprehension was the primary purpose. There were two substantial factors. First was comprehension which the appropriate previous knowledge used the reader for understanding the text, and second was reader actively got to involve the text by focusing to the text. In addition, other some factors were included in comprehension such as understanding the meaning of words by the author. Then in identifying the purpose of the author, constructing the ideas, understanding to connect between words and ideas, and also give judgement and evaluating the meaning of the text (Neufeld, 2005).

The researcher investigated the significant effect of Quizizz application in reading comprehension at Junior High School for respecting investigation, and some data were done by the Quizizz platform and acceded by a teacher for reading class. In conclusion, it seemed like an enthusiastic learning situation, and some students were motivated to learn reading comprehension.

LITERATURE REVIEW

According to Dewi et al (2020) stated that the mobile assisted language learning approach with the Quizizz application and it had an impact on the grammar mastery of students at English Language Education. It showed the conclusion of description and statistics of analysis. So the conclusion of the analysis was the mean score of the class by taking mobile assisted language learning strategy for using Quizizz.

A recent study by Priyanti et al (2019) said the mean of score to pupils who were taught by using Language Learning of Mobile-Assisted and combined Quizizz was higher than conventional approach. On the contrary, the aspect of reading analysis for conclusion which was mostly affected by the implementation of Mobile-Assisted Language Learning combined with Quizizz which determined the inference especially predicting outcomes, finding the main idea and caused relationship, effecting relationship for reading, and finding the implicit information from the text.

By the time goes on, it was found out that the application of the mobile assisted language learning approach increased the process in reading literally for Class D of English Education in studying Program (Juniarta et al., 2020). These indicators were seen by the students that they were more interesting to read participially. The process for reading implemented in the class gave part dynamically. It was an extension to dare students and convey ideas about reading. The Improvements happened for the literal reading process. It owned implications for upgrading the capacity of students to appreciate the reading. This was proved by increasing comprehension scores of reading. The increasing comprehension scores for reading occurred at the end of each cycle.

The data analysed students who did the test by using Quizizz because it must be fun, like playing a game by using the test. Moreover, some elements of games were very significant in the context. This matter made the test toward some games by using the mechanic and dynamic of games. This could be referred to as inference where students must be acceded by what they liked or loved to do. Then, the instructor had some works. It was how he created something which related to education, or what students would be interested in. So, this chance achieved the aims, and it was high (Pitoyo et al., 2019).

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Yunus & Hua (2021) stated the Quizizz application referred to an educational gamified manner, and it had gained gradually. The interested to learn education was as an application which had presented positive outcomes for learning by using the integration of unique game elements, like as leader boards, quiz reports and memes. These could assist in increasing obligation, and it seem a positive learning experience for stressless situations.

METHOD

In this case, the researcher used quantitative method measured by using quasi-experimental research. This research was made into two groups, the first group was an experimental, and the second group was a control group. This researcher used post-test and pre-test to get data. The total population was 78 students of three classes in 2020/2021 where in each class consisted of 26 students, and the samples were 52 students. The instrument used was the online test questions for multimedia Quizizz to see responses of students.

1. Findings and Discussions

The pre-test conducted by some students for the experimental and control groups that aimed to determine the similarity of students' abilities before conducting research. In conclusion of the pre-test, the students' initial ability data were obtained. as following:

Table 1. The result of first comprehension (Pre-test) Descriptive Statistics

	N	Min.	Max.	Mean	Standard Deviations
Pre-test Experimental	26	60	68	63.61	2.531
Pre-test Control	26	60	69	63.65	2.667

Table 1 described the experimental group the minimum 60, maximum 68 the mean score of pre-test 63.61 with standard deviation is 2.531 while the control group minimum 60, maximum 69. the mean of score 63.65 with standard deviation 2.667. This difference indicated that experimental and control groups were not different.

Table 2. Test Normality and Test of Homogeneity (Pre-test)

	Normal Test		Homogeneity (sig.)
Classes	Kolmogorov - Smirnova (sig.)	Shapiro - Wilk (sig.)	.859
Pre-test Experimental	.009	.028	
Pre-test Control	.107	.053	

Test Normality

Kolmogorov Smirnova			Shapiro-Wilk		
Statistic	Df	Sig.	Statistic	Df	Sig.

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Pre-test Experimental	.200	26	.009	.911	26
Post-test Experimental	.142	26	.187	.926	26
Pre-test Control	.155	26	.107	.925	26
Post-test Control	.183	26	.025	.912	26

Homogeneity of Test in Variance

		Levene's Statistic	Df 1	Df 2	Sig.
The result of student learning	Based on Mean	.032	1	50	.859
	Median	.006	1	50	.939
	Median and adjusted df	.006	1	49.284	.939
	trimmed mean	.012	1	50	.913

The table 2 above gave the conclusion of normality tests about pre-test classes by using the Kolmogorov-Smirnova and Shapiro-Wilk tests. Both experimental and control groups had an important value (sig.) it was greater than the significance of 5% (0.05), so that it could be drawn. Then the data in experimental and control groups respectively came from a distributed population normally. The homogeneity test aimed to look at the datum from the pre-test toward population by using the same variance (homogeneous). The homogeneity of the test above explained the pre-test results based on average values (based on mean) had an important value (sig.) of 0.859. This insignificant value was greater than the significance of 5% (0.05), so it could be concluded that the class of the control and experimental groups came from populations with homogeneous variance. It was hereby stated that H_0 was accepted or H_1 was rejected. Before performing the research, the data from the pre-test in experimental and control groups were tested by taking two samples of independent t_{test} that aimed to detect the experimental and the control groups had the same initial ability.

Table 3. The Independent of Two Samples t_{test} (Pre-test)

	Independent Samples Test
	t_{test} for Equality of Mean

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	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	.956	.038	.695
Equal variances not assumed	.956	.038	.695

Independent Samples Test

		Levene's Test for Equality of Variances	t test for Equality of Means						
		F	Sig.	Df	Sig. (2-tailed)	Mean Difference	Standard. Error Difference	95% Confidence Interval of Difference	
								Lowe	Up
The result of student learning	Equal variances assumed	.032	.859	50	.956	.038	.695	- 1.358	1.435
	Equal variances not			49.750	.956	.038	.695	- 1.358	1.435
	assumed								

In the table 3 above, the values (sig.) of pre-test scores of students with homogeneous variances (equal variances assumed) were 0.956 (sig.2-tailed). Furthermore, this value was compared with the significant level of the test (α) which was 5% (0.05), the result was 0.956 > 0.05. Thus, that H_0 was accepted or H_1 was rejected. Then, it could be concluded that average value of the pre-test results in experimental group and control group had the same initial ability. From the post-test results obtained data on the final ability of students, as follows:

Table 4. Final Ability Result (Post-test)

Descriptive Statistics

	N	Min.	Max.	Mean	Std. Deviation
Post-Test Experiment	26	76	98	82.84	5.127
Post-Test Control	26	70	82	75.61	3.395

In the table 4 showed that the experimental group had the minimum 76, and the maximum 98.00. The mean score of post-tests 82.84 with standard deviation was 5.127 while the control group minimum 70, The mean score of post-tests 75.61 with standard deviation was 3.395. This difference indicated that the experimental and control groups were different.

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Therefore, it can be inferred that the reading comprehension score improved after utilizing the Quizizz application.

Furthermore, it was analysed by making the paired samples t $_{test}$ which firstly it tested for analysis prerequisites in the part of a test normality and homogeneity of test.

Table 5. Test Normality and Homogeneity of Test (Post-test)

		Normality test		Homogeneity Test
The result of student learning	Class	Kolmogorov-Smirnova (sig.)	Shapiro-Wilk (sig.)	(sig.)
	Post-test Experiment	.187	.063	.203
	Post-test Control	.025	.030	

Normality of Test

Kolmogorov Smirnova			Shapiro-Wilk		
Statistic	Df	Sig.	Stat.	Df	Sig.
Pre-test Experimental	.200	26	.009	.911	.028
Post-test Experimental	.142	26	.187	.926	.063
Pre-test Control	.155	26	.107	.925	.058
Post-test Control	.183	26	.025	.912	.030

Variance in Homogeneity of Test

		Levene Statistics	df1	df2	Sig.
The result of student learning	Mean	1.663	1	50	.203
	Median	1.038	1	50	.313
	Median and with adjusted df	1.038	1	35.001	.315
	trimmed mean	1.401	1	50	.242

On table 5, The test normality of two post-test classes by using Kolmogorov- Smirnova and Shapiro-Wilk tests, both in experimental and control group had a significance value (sig.), where it was better than the significance of 5% (0.05), so it gave the data in the experimental and control group respectively came from a normally distributed population. It was hereby

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stated that H_0 was accepted or H_1 was rejected. The homogeneity of the test above, the post-test, obtained a significance value (sig.) 0.203. This significance value was greater than the significance of 5% (0.05), so this matter concluded that experimental and control group came from populations with homogeneous variance. It was hereby stated that H_0 was accepted or H_1 was rejected. Then the paired samples t $_{test}$ was tested to find the difference in consequence before and after giving treatment. The test was carried out on the conclusion of the pre-test and post- test in experimental and control groups.

Table 6. Paired Samples t $_{test}$ Experiment dan Control Group

Paired Sample Test			
Class	T	Df	Sig. (2-tailed)
Experiment	-16.522	25	.000
Control	-15.876	25	.000

Paired Sample Statistics

		Mean	N	Standard Deviation	Standard Error Mean
Pair 1	Pre-test Experiment	63.61	26	2.531	.49638
	Post-test Experiment	82.84	26	5.127	1.00566
Pair 2	Pre-test Control	63.65	26	2.667	.52313
	Post-test Control	75.61	26	3.395	.66582

Based on table 6, the experimental group paired samples t $_{test}$, the test of values (sig. 2-tailed) was 0.000, the hypothesis testing used was a one-sided right-hand test (the keyword is bigger), then the value of sig. The 2-tailed was first divided into two, it was 0.000/2 = 0. This value was smaller than the test significance level (α) which was 5% (0.05). So that H_0 was rejected or H_1 was accepted. It concluded the average post-test value was greater (increased) compared to the average pre-test value. Moreover, in the control group paired samples t $_{test}$, the test of value (sig. 2-tailed) was 0.000, because the hypothesis testing used was a one-sided right-hand test (the keyword is bigger), then the value of sig. The 2-tailed was divided into two, namely 0.000/2 = 0. The value was lower than the test significance level (α) which was 5% (0.05). So that H_0 was rejected or H_1 was accepted. It gave a conclusion that average post-test value was greater compared to average pre-test value. Then to respond the formulation of the issue in this learning, hypothesis testing used two independent sample t $_{tests.}$

Table 7. Hypothesis Experiment

	Independent sample test
	t $_{test}$ for Equality of Means

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	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Equal variances assumed	.000	7.231	1.206
Equal variances not assumed	.000	7.231	1.206

Statistics of Group

	Class	N	Mean	Std. Deviation	Std. Error Mean
The result of students learning	Post-Test Experiment	26	82.85	5.128	1.006
	Post-Test Control	26	75.62	3.395	.666

Independent Samples Test

The result of students learning		Levene' test for equality of Variances		t test for equality of mean					95% confidence Interval of the Difference	
		F	Sig.	T	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
	Equal variances assumed	1.663	.203	5.995	50	.000	7.231	1.206	4.808	9.653
	Equal variances not assumed			5.995	43.384	.000	7.231	1.206	4.799	9.662

Based on table 7, the significance value (sig.) of the post-test value of students with homogeneous variances (equal variances assumed) was 0.000 (sig. 2-tailed). Furthermore, the values were compared by the significant level of the test (α) which was 5% (0.05). the result was 0.000 < 0.05. So that H_0 was rejected or H_1 was accepted. It concluded average values of the post-test results in experimental and control groups had a difference. This issue of comparing on experimental and control groups before and after giving action.

On experimental group had average value in reading of experienced raising as (63.61-82.84) from score pre-test as 63.61 to 82.84 toward post-test. While on pre-test in control

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group as 63.65 and post-test in control group was 75.61. So from experimental result, it could be concluded that learning by using Quizizz application gave significant influence toward students' reading comprehension which compared between learning without using Quizizz application and lecturing method. So, This matter didn't give influence significantly toward students' reading comprehension.

This case was same with research who was done by Dewi et al (2020) stated that inferential analysis included hypothesis of test (independent t_{test}) appeared which $t_{observed}$ of data was more upgrading than $t_{critical}$ values. The comparing among $t_{observed}$ and $t_{critical}$ values were 3.740 > 1.669 that meant the value of $t_{observed}$ was higher than t_{value}. Besides, the value of data was 0.000 < 0.05. Thus, these findings showed where it was an impact of mobile assisted language learning strategy by taking application of Quizziz toward grammar mastery of students.

Zalika et al (2020) stated that the student in the post-test of experimental groups was more upgrading than the score of students in the post-test of the control group. That was implied which difference between students' reading comprehension in learning narrative text which took Quizizz as an alternative game or not. Therefore, using Quizizz to teach narrative material helped students to motivate their study in improving their understanding especially for improving their reading comprehension.

Ningrum (2022) stated that the Quizziz application was application to learn, it was fun and efficient application that would not be bored, challenging, varied, and simple learning application where it could be implied in some learning. Then the shortage of this application of Quizizz was stable by using internet. Some advices from the student said that the teachers could employ the application of Quizziz used in their all learning process regularly. The result of the research was the usage of the application of Quizizz generally had some positive impacts on the process in learning English. It meant that the Quizizz application motivated students to be more involved in class Quizizz such as they competed to get first rankings or got the biggest score as to be positively impact on students. Therefore, the Quizizz application was a simple, compelling, not monotonous, diverse, and inspiring learning application that can be used in everyplace with a stable network to all learners.

CONCLUSIONS

The results showed the effect of Quizziz application to improve students' reading comprehension. the Quizziz application also increases students' motivation to learn by feeling happy and enjoyed understanding by using the Quizziz application to improve students' reading comprehension.

This was one of the strategies to create a pleasant learning atmosphere, but it does not reduce students' understanding of the material whereas it takes an advantage of technological developments that it is the application of games.

From the explanations above it can be concluded that the students was involved with what they liked. Therefore, the task of the teacher is created by something related to educate some goals to students by their interests. Thus, the chances of achieving these goals will be high.

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REFERENCES

[1] Basuki, Y., & Hidayati, Y. (2019). *Kahoot! or Quizizz: the Students' Perspectives*. *July*. https://doi.org/10.4108/eai.27-4-2019.2285331

[2] Dewi, K. S., Myartawan, I. P. N. W., Swari, N. K. T. A., & Sugihartini, N. (2020). Quizizz Effect on Students' Grammar Mastery in Higher Efl Classroom Based Mobile Assisted Language Learning (Mall). *Language and Education Journal Undiksha*, *3*(1), 15–24.

[3] Juniarta, P. A. K., Dewi, K. S., Mahendrayana, G., & Swandana, I. W. (2020). *The Analysis on the Implementation of Mobile-Assisted Language Learning Strategy Through Quizizz Application to Improve Student's Reading Comprehension at Undiksha Singaraja*. *394*(Icirad 2019), 323–327. https://doi.org/10.2991/assehr.k.200115.053

[4] Meo, F. Di, & Martí-Ballester, C. P. (2020). Effects of the perceptions of online quizzes and electronic devices on student performance. *Australasian Journal of Educational Technology*, *36*(1), 111–125. https://doi.org/10.14742/ajet.4888

[5] Neufeld, P. (2005). Comprehension Instruction in Content Area Classes. *International Reading Association*, *59*(4), 302–312. https://doi.org/10.1598/rt.59.4.1

[6] Ningrum, D. W. (2022). The Utilization Of Quizizz Application In Online Learning. *Eltin Journal: Journal of English Language Teaching in Indonesia*, *10*(1), 55–64.

[7] Pitoyo, M. D., Sumardi, & Asib, A. (2019). Gamification based assessment: A test anxiety reductuion through game elements in quizizz platform. *International Online Journal of Education and Teaching (IOJET)*, *6*(3), 456–471.

[8] Priyanti, N. W. I., Santosa, M. H., & Dewi, K. S. (2019). Effect of Quizizz Towards the Eleventh-Grade English Students' Reading Comprehension in Mobile Learning Context. *Language and Education Journal Undiksha*, *2*(2), 71–80. https://doi.org/10.23887/leju.v2i2.20323

[9] Richards, J. C., & Renandya, W. A. (2002). Methodology in Language Teaching. *Methodology in Language Teaching*. https://doi.org/10.1017/cbo9780511667190

[10] Yunus, C. C. A., & Hua, T. K. (2021). Exploring a gamified learning tool in the ESL classroom: The case of Quizizz. *Journal of Education and E-Learning Research*, *8*(1), 103–108. https://doi.org/10.20448/JOURNAL.509.2021.81.103.108

[11] Zalika, V., Djunaidi, & Hidayad, F. (2020). Quizizz As An Alternative Game For Teaching Narrative Texts To Junior High School Students. *English Empower*, *5*(2), 76–78.