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INVESTIGATING THE EFFECT OF MULTIMEDIA USE AND MOTIVATION LEVEL ON READING COMPREHENSION OF 7TH GRADE STUDENTS IN MTS UNGGULAN MAMBAUL BAROKAH

Rafidah Fitriana[1], Sujito[2]
[1]Student of Master Degree Tadris English Language, UIN Raden Mas Said Surakarta, Indonesia
[2]Department of English Language Education, UIN Raden Mas Said Surakarta, Indonesia
[1]rafidah.254081002@mhs.uinsaid.ac.id, [2]sujito.team@gmail.com

Abstract

This study investigates the effect of multimedia use and students' motivation level on reading comprehension among seventh-grade students at MTS Unggulan Mambaul Barokah. The design applied a quantitative approach using a quasi-experimental, involving 13 students divided into experimental and control groups. Data were collected through pre-tests and post-tests using multiple-choice and essay questions, as well as a motivation questionnaire. The results of normality, validity, and reliability testing confirmed that the data were capable for analysis. Paired sample T-test results revealed an increase in the mean score from the pre-test score (82.57) to the post-test score (93.43), indicating that the use of multimedia had a positive effect on students' reading comprehension and level of motivation. The findings suggest that multimedia-assisted instruction can effectively enhance engagement and comprehension in reading activities, providing valuable insight for English teachers in optimizing their teaching strategies.

Keywords: Multimedia, Motivation Level, Reading Comprehension, Quasi-Experimental, EFL Students.

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I. INTRODUCTION

One of the important skill in ELT is reading. Reading can called as a basic process, because dig up the information and the knowledge and also the detail in the text. Of course, when read a text, the student must use a skill and strategies to find the meaning of the sentences. So reading is an interactive process, that always implicate between student and the text in its complex and its aspect. The student can simply the meaning of the text, the students. Can responsible for the text it is called for reading comprehension. Research data shows that 11.2% often reading comprehension difficulties, and 66.3% sometimes comprehension them. 22.4% of students rarely comprehension reading difficulties. (Ramadhianti et.al, 2023).

Reading comprehension is closely related to cognitive perspective, because a reader/student will create meaning by combining what is in their own mind or brain with what they have just read. From this process, the type and level of knowledge on the topic in the text produces its own meaning. This meaning arises due to the interplay between knowledge, beliefs, culture, and society. Therefore, in interpreting the meaning of a text, it is important to take these factors into account. (Kusumarasdyati, 2023)

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Technology plays a crucial role in education, as it can make learning easier, more convenient, engaging, and enjoyable. This aligns with the idea of using multimedia to enhance students' enthusiasm for learning. Multimedia in learning is highly functional, including enhancing student understanding, facilitating student learning, presenting knowledge in an engaging and functional way, and presenting material. Therefore, multimedia-assisted material delivery can make the learning process effective and motivating (Suyahman, 2024). Low motivation and unengaging media in learning impact student achievement. Therefore, multimedia must be implemented to capture students' attention (As Sabiq, 2017). Using multimedia in learning makes students highly engaged, interested, and highly motivated to learn. This is inseparable from teachers' creative and innovative strategies to capture student interest and motivation (Suyahman, 2024).

Based on the findings from previous research, Situngkir (2023) found that animated videos increase classroom engagement and create a learning environment that engages students. Therefore, this study offers novelty in the use of multimedia in reading comprehension and the level of motivation associated with the use of multimedia in reading comprehension. The creative method offered as an approach to learning that can increase students' interest and motivation in this digital era is by using educational applications that can effectively increase interest in reading (Annisa, 2024).

Considering the phenomena and problems in reading comprehension, the purpose of this study is to determine the effect of multimedia use on motivation levels. Therefore, this study measures the effects of the applied treatment. This will serve as material for teacher evaluation in teaching and increase student learning motivation.

II. METHODS

To measure this study used a quantitative approach with quasi-experimental design. This study used two population to be given different treatment, there are pretest and posttest. The variables are dependent and independent variable. The dependent variables conducted into two, there are multimedia use and motivation level. Beside that the independent variable is reading comprehension. Then the design using pretest posttest control design. Based from Gorard (2007) can draw like this:

Table 1. Research Design

	Allocation	Pre-Test	Intervention	Post-Test
Experimental	random	measurement	treatment	measurement
Control	random	measurement	-	measurement

This study use a complete procedure, there are: the research subject or the population is from 7th grade students in MTS Unggulan Mambaul Barokah. The student with total 13 students are divided into 2 group design.

The instrument use a pretest and posttest and for the question use a multiple choice and essay about describing people as a material. Then for the motivation level using a questionnaire. This data will be testing with SPSS in normality, reliability, validity, and paired T test.

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III. RESULT AND DISCUSSION

The result and discussion for this research can see in these tables, Then the researcher wan to analyze it one by one.

Table 2. Normality Test

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Pretest Control	.359	6	.015	.808	6	.069
New Posttest Control	.201	6	.200*	.964	6	.848
Pretest Experiment	.326	6	.046	.828	6	.103
Posttest Experiment	.237	6	.200*	.803	6	.062

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

This test for multimedia use that used by researcher. From the table, it can be seen that the normality test used is Shapiro-Wilk because the population size of the study is less than 50 people, so this study uses Shapiro Wilk. From Shapiro Wilk, if sigmoid > 0.05, it means that the data is normal, and if sigmoid < 0.05, it indicates non-normal data. From the table, it can be concluded that the pretest control class has a value of 0.069, the posttest control class has a value of 0.848, the pretest experimental class also has a value of 0.103, and the posttest experimental class has a value of 0.062, indicating that all tests examined using the normality test include normal data.

Table 3. Validity Test

		P01	P02	P03	P04	P05	P06	P07	P08	P09	P10	SUM
P01	Pearson Correlation	1	.505	.507	.617*	.592*	-.035	.521	.441	.515	.340	.659*
	Sig. (2-tailed)		.078	.077	.025	.033	.911	.068	.131	.071	.255	.014
	N	13	13	13	13	13	13	13	13	13	13	13
P02	Pearson Correlation	.505	1	.520	.312	.378	.340	.380	.185	.378	.552	.647*
	Sig. (2-tailed)	.078		.068	.300	.203	.256	.201	.545	.203	.050	.017
	N	13	13	13	13	13	13	13	13	13	13	13
P03	Pearson Correlation	.507	.520	1	.690**	.733**	.465	.264	.390	.659*	.422	.793**
	Sig. (2-tailed)	.077	.068		.009	.004	.110	.383	.188	.014	.151	.001
	N	13	13	13	13	13	13	13	13	13	13	13
P04	Pearson Correlation	.617*	.312	.690**	1	.662*	.268	.438	.558*	.672*	.665*	.795**
	Sig. (2-tailed)	.025	.300	.009		.014	.376	.135	.047	.012	.013	.001
	N	13	13	13	13	13	13	13	13	13	13	13
P05	Pearson Correlation	.592*	.378	.733**	.662*	1	.313	.308	.466	.626*	.326	.755**
	Sig. (2-tailed)	.033	.203	.004	.014		.298	.305	.108	.022	.277	.003
	N	13	13	13	13	13	13	13	13	13	13	13
P06	Pearson Correlation	-.035	.340	.465	.268	.313	1	.373	.123	.277	.244	.536
	Sig. (2-tailed)	.911	.256	.110	.376	.298		.209	.689	.359	.422	.059
	N	13	13	13	13	13	13	13	13	13	13	13
P07	Pearson Correlation	.521	.380	.264	.438	.308	.373	1	.743**	.552	.507	.701**
	Sig. (2-tailed)	.068	.201	.383	.135	.305	.209		.004	.051	.077	.008
	N	13	13	13	13	13	13	13	13	13	13	13
P08	Pearson Correlation	.441	.185	.390	.558*	.466	.123	.743**	1	.844***	.643*	.717**
	Sig. (2-tailed)	.131	.545	.188	.047	.108	.689	.004		<,001	.018	.006
	N	13	13	13	13	13	13	13	13	13	13	13
P09	Pearson Correlation	.515	.378	.659*	.672*	.626*	.277	.552	.844***	1	.771**	.850***
	Sig. (2-tailed)	.071	.203	.014	.012	.022	.359	.051	<,001		.002	<,001
	N	13	13	13	13	13	13	13	13	13	13	13
P10	Pearson Correlation	.340	.552	.422	.665*	.326	.244	.507	.643*	.771**	1	.738**
	Sig. (2-tailed)	.255	.050	.151	.013	.277	.422	.077	.018	.002		.004
	N	13	13	13	13	13	13	13	13	13	13	13
SUM	Pearson Correlation	.659*	.647*	.793**	.795**	.755**	.536	.701**	.717**	.850***	.738**	1
	Sig. (2-tailed)	.014	.017	.001	.001	.003	.059	.008	.006	<,001	.004	
	N	13	13	13	13	13	13	13	13	13	13	13

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The table presents serve the data from the Motivation Level questionnaire consisting of 10 statements with descriptions.

1: Strongly disagree
2: Disagree
3: Neutral
4: Agree
5: Strongly agree

To establish whether the questionnaire is valid or not, compare the calculated r value with the r value's table. If r calculated > r table, then the variable is said to be valid. Conversely, the variable is said to be invalid if the value of r calculated < r table. From the test results, with a population of 13 students, r table shows a number of 0.553. So, from the table, the number shows more than (>) r table, indicating that it is valid.

Table 4. Reliability Test

Cronbach's Alpha	N of Items
.880	10

This study used Cronbach's Alpha reliability test. Cronbach's Alpha states that if the value is greater than (>) 0.60, the data is reliable. Based from the results of the reliability test, the questionnaire on motivation level showed reliability because it was at 0.880.

Table 5. Paired T Sample

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest Experiment	82.57	7	16.682	6.305
	Posttest Experiment	93.43	7	5.255	1.986

The T-test in this study was used in multimedia use with multiple choice and essay questions. The measurement of the T-test can be seen from the mean. From the table, the mean recorded in the pretest (82.57) and posttest (93.43) shows an increase, which means that the treatment carried out showed improvement.

Findings from the effects of multimedia use and motivation levels on reading comprehension show a positive or increasing influence. Students used multimedia presented with material relevant to what they had learned and were then tested by completing multiple-choice and essay questions. After the treatment, students answered a questionnaire containing statements about their motivation level. Research by Annisa et al. (2024) shows an increase in students' comprehension when reading using applications.

This experimental study used a pretest-posttest control design, with a total of 13 students, 7 students in the experimental class and 6 students of the control class. Four tests on questions and questionnaire statements were conducted using SPSS, yielding results that showed a positive effect from the research.

IV. CONCLUSION

Based on the findings, the use of multimedia significantly improves students' reading comprehension and motivation levels. The experimental class that received multimedia-based instruction showed higher post-test scores compared to the control group, indicating a positive effect of the treatment. The results also demonstrate that integrating multimedia makes the learning process more engaging and effective, encouraging students to be more motivated and active during reading activities. Therefore, teachers are encouraged to implement multimedia

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resources in English teaching to enhance students' comprehension and maintain their learning interest. Future research may explore the long-term effects of multimedia use across different skills and grade levels to broaden the understanding of its impact in EFL contexts.

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