

The Influence of Educational Games and Learning Management on the Learning Motivation of Kindergarten Students in Malang City

Indah Annisa Sena Hutabarat*, Sunarni, Sultoni, Imron Arifin

State University of Malang, Jl. Semarang No. 5 Malang, East Java, Indonesia

*Author of correspondence, Email: indahannisa217@gmail.com

Abstract

The research objectives are to determine: 1) the level of educational games; 2) level of learning management; 3) level of learning motivation; 4) the influence of educational games on student learning motivation, 5) the influence of learning management on student learning motivation, 6) the influence of educational games and learning management on student learning motivation. This research is research that uses quantitative methods. The population of this study was kindergarten students throughout Malang City with a sample size of 206 respondents. The research results illustrate: 1) The level of educational games is included in the high category; 2) The level of learning management is included in the high category; 3) The level of student learning motivation is in the high category; 4) There is a significant positive influence of educational games on student learning motivation with a correlation coefficient value of 0.736, which is included in the strong category; 5) There is a significant positive influence of learning management on student learning motivation with a correlation coefficient value of 0.831, which is in the very strong category; and (6) There is a positive and significant influence together between education games and learning management on student learning motivation.

Keywords: education games; learning management; learning motivation

1. Introduction

In the 23rd century, gamification and game-based learning are widely applied in the learning process. Both have the same approach to a more interactive teaching and learning process (PdP). After the COVID-19 pandemic, the rapid development of technology in Indonesia requires educators to use gamification or learning involving educational games during distance learning. Distance learning is a new method that is increasingly spreading as a fundamental method of the open education system and is also a point of divergence and differentiation from conventional, following the rapid development and closure of training units due to COVID-19. For this reason, educators need a learning management design that is in accordance with current conditions and circumstances so that learning continues to be carried out effectively. This is the only political and educational solution to continue the educational and pedagogical process. Gamification is a process that aims to increase extrinsic and intrinsic motivation that involves people in fun activities (Marisa et al., 2020). Low learning motivation in early childhood is a quite complex problem and can have a long-term impact on children's development (Budiariawan, 2019).

to (Wibawanto 2020) educational games are a type of game that is specifically designed to contain elements of learning and aims to improve the player's ability to understand material (Ramadhan, K. 2016). Games or games are a form of physical and intellectual social and

individual activity that is organized based on certain rules. Educational games are all types of games designed to create an interactive and beneficial learning environment for students. For this reason, educators need a learning management design that is appropriate to current conditions and circumstances so that learning continues to be carried out effectively.

Learning management is a management process that includes planning, organizing, controlling, directing and evaluating activities related to the learning process. It involves various factors aimed at achieving learning objectives. Thus, teachers as educators need to have the ability to understand and produce learning objectives that suit the needs of students. Basically, learning objectives are statements about the behavior that students are expected to master after participating in learning experiences including competencies in knowledge, attitudes and skills obtained through the teaching and learning process. Therefore, learning management aims to create an active, creative, effective and meaningful learning environment, as well as fun. This aims to facilitate the development of students' potential and achieve educational goals with effectiveness and efficiency (Daryanto 2013).

In the context of learning, it is important to need encouragement or motivation that can increase students' enthusiasm for learning, so that they can achieve satisfactory learning results in accordance with expectations. This encouragement can include an individual's desires, concerns, wishes, or aspirations in learning activities. According to (Ricardo, R., & Meilani 2017) learning motivation is an inner strength that encourages a student to be willing and persistent in learning. This involves maximum and directed effort in the learning process with the aim of achieving the best results that have been the target during the learning process.

(Suryabrata 2014) states variations in motivation, which are divided into two types, namely motivation originating from external factors (extrinsic motives) and internal factors (intrinsic motives). Extrinsic motives are motives that are triggered by external stimuli or encouragement, such as someone working hard because they are notified that there will be an exam, or reading material because they are instructed that it is necessary before applying for a job, and so on. Intrinsic motives are motives that work without the need for external stimulation. Individuals have an internal drive to carry out these actions.

2. Method

The research method used is a quantitative approach using descriptive analysis methods with a statistical approach supported by multiple regression analysis techniques to analyze the contribution of independent variables to the dependent variable (Sugiyono, 2021). The variable state of education games, learning management and learning motivation. Correlation analysis is used to determine the influence between variables. The population chosen was kindergarten teachers throughout Malang City with the help of parents of 1,374 students. The sample size was determined using 15% of the population with the final result being a sample size of 206 people. The sampling technique uses proportional random sampling. In this technique, sampling in each stratum or region is determined in a balanced manner with the number of subjects in each stratum or region so that a representative sample is obtained.

Data collection techniques through online questionnaires using Googleform. The assessment in the study used a Likert scale assessment with alternative answers of 4-1 to minimize neutral answers. Test the validity of the items using the Product Moment Pearson Correlation technique using SPSS 26 for widows. An item is declared valid if the rcount value > rtable value. In this study, trials were carried out with a total of 30 respondents and an rtable

value was obtained with a significance level of 5% of 0.361. Based on the validity test, there were two items that were declared invalid. The invalid item was dropped because the valid item represented the indicator. The reliability test in this study used the Cronbach's Alpha technique with the help of SPSS 26 for widows. The instrument is said to be reliable if the rtable value with a significance level of 5% is 0.361. The results of the reliability test show that the Cronbach's Alpha value for the education games variable is $0.965 > 0.361$, the learning management variable is $0.973 > 0.361$, and the learning motivation variable is $0.966 > 0.361$. Based on these results, this research instrument can be declared valid and reliable. The data analysis techniques in this research are descriptive analysis, correlation and hypothesis testing.

3. Results and Discussion

3.1 Result

3.1.1 Descriptive Analysis

3.1.1.1 Description Data *Education Games*

The educational games variable is represented by 15 statement items with a total of 206 respondents (N). Class categories include very high, high, low and very low. A description of the educational games category for kindergarten students throughout Malang City can be seen in Table 1.

Table 1. Distribusi Frekuensi Education Games

Kelas Interval	Kategori	Frekuensi	Persentase
49 - 60	Sangat tinggi	51	25%
37 - 48	Tinggi	124	60%
26 - 36	Rendah	31	15%
15 - 25	Sangat Rendah	0	0%
Total		206	100%

Based on Table 1, it shows that of the 206 respondents, 51 respondents (25%) stated that students' educational games were in the very high category, 124 respondents (60%) stated that students' educational games were in the high category and 31 respondents (15%) states that students' educational games are in the low category. From the results of these percentages, it can be concluded that educational games for kindergarten students in Malang City are in the high category.

3.1.1.2 Learning Management Data Description

The learning management variable is represented by 20 statement items with a total of 206 respondents (N). Class categories include very high, high, low and very low. A description of the kindergarten learning management categories throughout Malang City can be seen in Table 2.

Table 2. Distribusi Frekuensi Manajemen Pendidikan

Kelas Interval	Kategori	Frekuensi	Persentase
99 - 120	Sangat tinggi	79	38%
76 - 98	Tinggi	105	51%
53 - 75	Rendah	22	11%
30 - 52	Sangat Rendah	0	0%
Total		206	100%

Based on Table 2, it shows that of the 206 respondents, 79 respondents (38%) stated that learning management was in the very high category, 105 respondents (51%) stated that learning management was in the high category and 22 respondents (11%) stated that learning management is in the low category. From these percentage results, it can be concluded that kindergarten learning management in Malang City is in the high category.

3.1.1.3 Description of Learning Motivation Data

The learning motivation variable is represented by 15 statement items with a total of 206 respondents (N). Class categories include very high, high, low and very low. A description of the learning motivation categories of Kindergarten students in Malang City can be seen in Table 3.

Table 3. Distribusi Frekuensi Motivasi Belajar

Kelas Interval	Kategori	Frekuensi	Persentase
95 - 116	Sangat tinggi	82	40%
73 - 94	Tinggi	124	60%
51 - 72	Rendah	9	0%
29 - 50	Sangat Rendah	0	0%
Total		392	100%

Based on Table 3, it shows that of the 206 respondents, 82 respondents (40%) stated that students' learning motivation was in the very high category and 124 respondents (60%) stated that students' learning motivation was in the high category. From these percentage results, it can be concluded that the learning motivation of kindergarten students in Malang City is in the high category.

3.1.2 Test Data Assumptions

3.1.2.1 Normality Test

In this study, the normality test was carried out using the Kolmogorov-Smirnov statistical test. Data normality can be determined by comparing the level of significance. If the significance value is > 0.05 then the data is normally distributed. The results of the normality test can be seen in table 4.

Table 4. Hasil Uji Normalitas

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		206
Normal Parameters ^{ab}	Mean	.0000000
	Std. Deviation	3.11735118
Most Extreme Differences	Absolute	.046
	Positive	.046
	Negative	-.046
Test Statistic		.046
Asymp. Sig. (2-tailed)		.200 ^{cd}

From Table 4 above, it shows that the value of Asymp. Sig (2-tailed) 0.200 > the level of significance, namely 0.05, thus indicating that the research data is normally distributed. Therefore, it was concluded that the research data was declared to be normally distributed, thus the data normality requirements in the hypothesis testing equation were met.

3.1.2.2 Multicollinearity Test

In this study, the multicollinearity test was carried out using the Variant Inflation Factor. If the VIP value is less than 10, it can be concluded that there is no multicollinearity between variables. The results of the multicollinearity test can be seen in Table 5.

Table 5 Hasil Uji Multikoleniaritas

Model	Coefficients ^a				Collinearity Statistics			
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Tolerance	VIF
	B	Std. Error	Beta					
1 (Constant)	9.510	1.636			5.814	.000		
Education Games (X1)	.284	.047	.304		6.062	.000	.513	1.951
Manajemen Pembelajaran (X2)	.415	.034	.619		12.347	.000	.513	1.951

a. Dependent Variable: Motivasi Belajar (Y)

From Table 5 it is known that the Tolerance value of the education games variable (X1) and the learning management variable (X2) is 0.513, which is > 0.10. Furthermore, the VIF value of the education games variable (X1) and the learning management variable (X2) is 1.951 < 10. Based on these results it can be concluded that there are no symptoms of multicollinearity in the regression model used.

3.1.2.3 Heteroscedasticity Test

Heteroscedasticity testing was carried out using the Glejser test. The Glejser test is carried out by regressing the independent variables on their absolute residual values. If the Sig value. > 0.05 then there are no symptoms of heteroscedasticity. The results of the heteroscedasticity test can be seen in table 6.

Table 6. Hasil Uji Heteroskedastisitas

Model	Unstandardized		Standardized	t	Sig.
	Coefficients		Coefficients		
	B	Std. Error	Beta		
1 (Constant)	2.139	.986		2.170	.031
Education Games (X1)	.002	.028	.008	.078	.938
Manajemen Pembelajaran (X2)	.004	.020	.019	.193	.848

a. Dependent Variable: ABS_RES

From Table 6 it is known that the Sig value. For the education games variable (X1) it is $0.938 > 0.05$. So it can be concluded that there are no symptoms of heteroscedasticity. In the learning management variable (X2), the Sig value is known. $0.848 > 0.05$. So it can be concluded that there are no symptoms of heteroscedasticity in the regression model.

3.1.3 Hypothesis Test

3.1.3.1 Pearson Product Moment Analysis

Pearson Product Moment analysis was carried out by comparing the Sig. where if the Sig value. < 0.05 or $r_{count} > r_{table}$ then there is a relationship between the variables being linked. Based on the product moment table with 206 respondents, $r_{table} = 0.136$. This analysis was carried out with the help of the SPSS 26 for widows program. The results of the correlation analysis of product moment education games on learning motivation can be seen in Table 7.

Table 7. Hasil Analisis Korelasi Product Moment X1 dan X2 terhadap Y

		Correlations		
		Education Games	Manajemen Pembelajaran	Motivasi Belajar
Education Games (X1)	Pearson Correlation	1	.698**	.736**
	Sig. (2-tailed)		<.001	<.001
	N	206	206	206
Manajemen Pembelajaran (X2)	Pearson Correlation	.698**	1	.831**
	Sig. (2-tailed)	<.001		<.001
	N	206	206	206
Motivasi Belajar (Y)	Pearson Correlation	.736**	.831**	1
	Sig. (2-tailed)	<.001	<.001	
	N	206	206	206

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

From Table 7, the education games variable shows the Sig value. (2-tailed) between Education Games (X1) and Learning Motivation (Y) is $0.000 < 0.05$ or the value of $r_{count} > r_{table}$, namely $0.736 > 0.136$. The Pearson Correlation value of 0.736 is included in the strong

category because it is in the interval 0.60 – 0.799. Acquisition of sig value. equal to $0.000 < 0.05$, then H_0 is rejected and H_1 is accepted. So it can be concluded that there is a positive and significant relationship between educational games (X1) and learning motivation (Y).

In the learning management variable, the Sig value is known. (2-tailed) between Learning Management (X2) and Learning Motivation (Y) is $0.000 < 0.05$ or the value of $r_{count} > r_{tabel}$, namely $0.831 > 0.113$. The Pearson Correlation value of 0.831 is included in the very strong category because it is in the interval 0.80 – 1.000. Acquisition of sig value. equal to $0.000 < 0.05$, then H_0 is rejected and H_1 is accepted. So it can be concluded that there is a positive and significant relationship between learning management (X2) and learning motivation (Y).

3.1.3.2 T Test

The t test is a test to determine the magnitude of the influence of an independent variable on the dependent variable. The basis for decision making is if the Sig value. ≥ 0.05 or $t_{count} \leq t_{table}$, then H_0 is accepted and H_1 is rejected. Meanwhile, if the Sig. < 0.05 or $t_{count} > t_{table}$, then H_0 is rejected and H_1 is accepted. T table value $(\alpha/2 ; n-k-1) = (0.05/2 ; 206-2-1) = (0.025 ; 203) = 1.971$. The results of the influence test can be seen in table 8.

Table 8. Hasil Uji T

Model	Coefficients ^a				Collinearity Statistics			
	Unstandardized Coefficients		Standardized Coefficients		t	Sig.	Tolerance	VIF
	B	Std. Error	Beta	t				
1 (Constant)	9.510	1.636		5.814	.000			
Education Games (X1)								
Manajemen Pembelajaran (X2)	.284	.047	.304	6.062	.000	.513	1.951	
	.415	.034	.619	12.347	.000	.513	1.951	

a. Dependent Variable: Motivasi Belajar (Y)

The t test is a test to determine the magnitude of the influence of an independent variable on the dependent variable. The basis for decision making is if the Sig value. ≥ 0.05 or $t_{count} \leq t_{table}$, then H_0 is accepted and H_1 is rejected. Meanwhile, if the Sig. < 0.05 or $t_{count} > t_{table}$, then H_0 is rejected and H_1 is accepted. T table value $(\alpha/2 ; n-k-1) = (0.05/2 ; 206-2-1) = (0.025 ; 203) = 1.971$. The results of the influence test can be seen in table 8.

3.1.3.3 F Test

The f test is a test to find out whether the independent variables together (simultaneously) influence the dependent variable. The basis for decision making is if the Sig value. ≥ 0.05 or $f_{count} \leq f_{table}$, then H_0 is accepted and H_1 is rejected. Meanwhile, if the Sig. < 0.05 or $f_{count} > f_{table}$, then H_0 is rejected and H_1 is accepted. The ANOVA results can be seen in table 9.

Table 9. Hasil Uji F

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5622.267	2	2811.133	286.452	.000 ^b
	Residual	1992.165	203	9.814		
Total		7614.432	205			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

The results of the F test (F test) show that the $f_{(count)}$ value is 286.452 with a significance value of 0.000 which is smaller than $\alpha = 0.05$. This means that the model used in this research is feasible. These results mean that two independent variables are able to predict or explain the phenomenon of Learning Motivation (Y). It can be concluded that the variables Education Games (X1) and Learning Management (X2) simultaneously have a significant effect on Learning Motivation (Y).

3.1.3.4 Coefficient of Determination

The Coefficient of Determination basically measures the proportion or percentage contribution of variables simultaneously, where $0 \leq R^2 \leq 1$. A small R^2 value means that the ability of the independent variables to explain variations in the dependent variable is very limited. The results of calculating the R^2 coefficient can be seen in Table 10.

Table 10. Hasil Uji Koefisien R Square

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.871 ^a	.759	.758	8.63748	1.894

a. Predictors: (Constant), Manajemen Pembelajaran (X2), Education Games (X1)

b. Dependent Variable: Motivasi Belajar (Y)

From Table 4.10 it is known that the adjusted R Square value is 0.738, so the independent variable in this study influences the dependent variable by 73.8%. Based on these results, it can be concluded that the influence of educational games (X1) and learning management (X2) simultaneously on students' learning motivation (Y) is 73.8% and 26.2% is influenced by other variables..

3.1.3.5 Multiple Regression Analysis

Multiple regression analysis is used to analyze the influence of the independent variables, namely education games (X1) and learning management (X2), on the (dependent) variable, namely learning motivation (Y). The results of the regression test can be seen in Table 11.

Table 11. Hasil Analisis Regresi Linier Berganda

Model	Coefficients ^a				Collinearity Statistics		
	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Tolerance	VIF
	B	Std. Error	Beta				
1 (Constant)	9.510	1.636		5.814	.000		
Education Games (X1)	.284	.047	.304	6.062	.000	.513	1.951
Manajemen Pembelajaran (X2)	.415	.034	.619	12.347	.000	.513	1.951

a. Dependent Variable: Y

The multiple regression equation obtained is as follows:

$$Y = a + b_1 x_1 + b_2 x_2$$

$$Y = 9,510 + 0,284x_1 + 0,415x_2$$

Based on the calculation of the multiple regression equation, it is known that the constant value is 9.510, meaning that if there are no changes to Education Games (X1) and Learning Management (X2) or the value is constant (fixed), then the amount of Learning Motivation (Y) is 9.510. The regression coefficient value for the education games variable (X1) is 0.284. This value shows that if the other independent variables have constant values and Education Games (X1) has increased by 1 unit, then Learning Motivation (Y) has increased by 0.284. The coefficient is positive, meaning that there is a positive relationship between Education Games (X1) and Learning Motivation (Y). The higher the Education Games (X1), the higher the Learning Motivation (Y). The regression coefficient value of the learning management variable (X2) is 0.415. This value shows that if the other independent variables have constant values and Learning Management (X2) has increased by 1 unit, then Learning Motivation (Y) has increased by 0.415. The coefficient is positive, meaning that there is a positive relationship between Learning Management (X2) and Learning Motivation (Y). The higher the Learning Management (X2), the higher the Learning Motivation (Y).

3.2 Discussion

3.2.1 Level of Educational Games in Kindergartens throughout Malang City

The level of educational games in Kindergartens throughout Malang City is in the high category, based on the mean result of 43.67 (rounded to 44) which is in the 37-48 interval so that the level of implementation of educational games in Kindergartens throughout Malang City is included in the category Tall. This illustrates that students use educational games well. In addition, the percentage results show that of the 206 respondents, 124 respondents (60%) stated that students' educational games were in the high category, 51 respondents (25%) stated that students' educational games were in the very high category, and 31 respondents (15%) stated that students' educational games were in the low category. Thus, it can be concluded that educational games for students in kindergartens throughout Malang City are

included in the high category. The educational games used can be said to meet the criteria for supporting the learning process.

Play includes various forms of activities that provide satisfaction to children, is non-serious, flexible, and uses games that are imaginatively transformed to suit the adult world. In kindergartens throughout Malang City, learning activities are integrated into play, and this can be found in every activity that stimulates children's development. Children's playtime is arranged to form discipline, they play in groups to build social skills, and move according to the rhythm of the game to develop their physical motor skills. During play, children are asked to express ideas and knowledge to solve problems (Marlina, Qolbi, & Putera, 2020). Thus, playing is a highly anticipated and happy activity for children, which is able to stimulate all aspects of their development

3.2.2 Level of Learning Management in Kindergartens throughout Malang City

The level of learning management in Kindergartens throughout Malang City is included in the high category, based on the mean result of 63.10 (rounded to 63) which is in the interval 51 - 65 so that the level of learning management in Kindergartens throughout Malang City is included in the High category . This illustrates that learning management in kindergartens throughout Malang City is implemented well. In addition, the percentage results show that of the 206 respondents, 105 respondents (51%) stated that learning management was in the high category, 79 respondents (38%) stated that learning management was in the very high category, and 22 respondents (11%) stated that learning management is in the low category. Thus, it can be concluded that learning management in kindergartens throughout Malang City is included in the high category.

In learning management in kindergartens throughout Malang City, it begins with planning learning according to the established curriculum. Kindergarten educators prepare learning plans, such as RPPM/RPPH, before carrying out teaching and learning activities. Based on the four management functions, namely planning, organizing implementing and evaluating, it can be seen that these four functions can be applied to formal and non-formal kindergarten institutions.

3.2.3 Level of Learning Motivation in Kindergartens throughout Malang City

The level of learning motivation in Kindergartens throughout Malang City is included in the high category, based on the mean result of 48.11 (rounded to 48) which is in the interval 37 - 48 so that the level of learning management in Kindergartens throughout Malang City is included in the High category . Based on the percentage results, it shows that out of 206 respondents, 124 respondents (60%) stated that students' learning motivation was in the high category and 82 respondents (40%) stated that students' learning motivation was in the very high category. Thus, it can be concluded that the learning motivation of students in kindergartens throughout Malang City is in the high category. This illustrates that students in kindergartens throughout Malang City have very good learning motivation.

The role of learning motivation in students' learning activities is very crucial. Learning motivation is the main determining factor for success in the learning process. Without motivation, a student cannot achieve success in learning. In kindergartens throughout Malang City, teachers have this role in increasing children's learning motivation, so that learning

management must be adjusted to students' abilities. Teachers are responsible for creating effective classroom management to produce quality learning. Classroom management includes all efforts to create a pleasant learning atmosphere and can motivate students well. In general, environmental factors, especially the learning environment, also influence a person's learning motivation (Litasari et al., 2021).

3.2.4 The Influence of Educational Games on the Learning Motivation of Kindergarten Students in Malang City

Based on the results of hypothesis testing using Pearson Product Moment correlation, it is stated that there is a significant positive influence with a correlation coefficient value of 0.736, including in the strong category with a correlation coefficient value of 0.60-0.799. The analysis shows that the Education Games variable has a significance value of 0.000 <0.05, so H₀ is rejected and H₁ is accepted. So it can be concluded that the hypothesis is that there is a significant influence of Education Game (X₁) on learning motivation (Y) of Kindergarten students in Malang City.

Game-based learning creates a paradigm that integrates game elements into educational contexts, resulting in a more dynamic and engaging learning experience. In this context, games function not only as a medium for transferring information, but also as a tool to facilitate exploration, creativity and problem solving. The uniqueness of this interactive experience increases student participation, builds higher levels of engagement, and encourages intrinsic motivation to understand and master the course material (Sappile et al., 2024). The results of this research are in line with (Pratiwi et.al, 2021), (Dian et.al, 2020), (Walidah et al., 2022), (Nisa & Susanto, 2022) and (Pamungkas et.al, 2023) which show that there is a positive and significant influence of educational games on student learning motivation. However, the results of this study are different from those of (Fakhrunnisaa & Mardawati, 2023) showing that there is no significant influence of educational games on learning motivation.

3.2.5 The Influence of Learning Management on the Learning Motivation of Kindergarten Students in Malang City

Based on the results of hypothesis testing using Pearson Product Moment correlation, it is stated that there is a significant positive influence with a correlation coefficient value of 0.831, including in the very strong category with a correlation coefficient value of 0.80-1.000. The analysis shows that the learning management variable has a significance value of 0.000 <0.05, so H₀ is rejected and H₁ is accepted. So it can be concluded that the hypothesis is that there is a significant influence of learning management (X₂) on learning motivation (Y) of Kindergarten students throughout Malang City. This explains that if the implementation of learning management is improved, the learning motivation of students in kindergartens throughout Malang City will also increase. Early childhood education includes learning that focuses on activities, understanding concepts, social skills, creativity, and moral knowledge. Early Childhood Education (PAUD) also helps develop physical abilities, such as motor coordination and manipulative skills, as well as language and cognitive abilities (Julaiha et al., 2023). Through good education, children can understand the world around them, improve their cognitive abilities, and learn in a fun and interesting way. Apart from that, PAUD also prepares children for formal education in the future, so that they can more easily adapt to the formal school environment and understand the subject matter.

Every child has different interests, needs and abilities, so teaching approaches and strategies must be adapted to their individual needs (Hutabalian et.al, 2023). This can increase children's interest and motivation in learning because they feel appreciated and understood. Apart from that, learning success in early childhood is also greatly influenced by a positive and supportive learning environment. The results of this research are in line with (Wati & Surbakti, 2023), (Santoso et.al, 2017), (Hutabalian et al., 2023), (Sholehuddin & Wardani, 2023) and (Magdalena et.al, 2020) showing that management learning has a positive and significant effect on student learning motivation.

3.2.6 The Influence of Educational Games and Learning Management on the Learning Motivation of Kinergarten Students in Malang City

Based on the results of hypothesis testing, it shows that the educational games and learning management variables together influence the learning motivation of students in kindergartens throughout Malang City. This is proven by the R-Square value of 0.738, which indicates that as much as 73.8% of the variation in learning motivation can be explained by educational games and learning management. The results of this research show that the p-value obtained from the analysis is $0.000 < 0.05$, indicating that there is a positive and significant influence together between education games and learning management on student learning motivation. The success of game-based learning in combining technology with education can also be assessed from its ability to encourage the development of critical skills and problem solving (Qurtubi, A., & Fauzi, 2023). Through the challenges and simulations presented in the game, students not only gain knowledge but also train their abilities to think critically, collaborate, and overcome obstacles (Sappile et al., 2024). Thus, game-based education not only provides information, but also creates an immersive learning environment, where students can develop skills that are useful in everyday life.

The use of game-based learning has a significant impact on student motivation and learning achievement. With intelligent design, this method can create a learning environment that is deep, interesting, and motivates students to achieve optimal performance. By paying attention to student diversity and maintaining a balance between game aspects and the substance of the subject matter, game-based learning can be an effective tool in preparing students for the challenges of the modern world of education (Nisa & Susanto, 2022). Learning management needs to be seen from a new perspective as a guide to understanding this concept. This includes a variety of factors, not just techniques and strategies, but also involves internal and external factors that influence students and the classroom environment (Septa, 2018). Class management is an effort to utilize the potential that exists in the class. Teachers also act as second parental figures for students at school. They have an important role in the learning process, which is the core of teaching activities and involves all the skills that a teacher must have (Hutabalian et al., 2023).

4. Conclusion

Based on the results of the research and discussion that have been described, it can be concluded that: (1) educational games in kindergartens throughout Malang City are included in the high category; (2) learning management in kindergartens throughout Malang City is in the high category; (3) the learning motivation of students in kindergartens throughout Malang City is in the high category; (4) there is a significant influence of educational games on the

learning motivation of students in kindergartens throughout Malang City; (5) there is a significant influence of learning management on the learning motivation of kindergarten students throughout Malang City; (6) there is a significant influence of educational games and learning management on the learning motivation of kindergarten students throughout Malang City.

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