The Effect of the Gadgets Use on Motivation and Learning Outcomes of Class VI Students in Al-Quran Hadith Lessons at MI Al-Muwazanah Kediri

Agus Miftakus Surur
IAIN Kediri
e-mail: surur.math@gmail.com

Fitri Khoirun Nikmah
IAIN Kediri
e-mail: fitrinikmah101@gmail.com

Dewi Rizqi Ilyana Nuzula
IAIN Kediri
e-mail: adimarsyada@gmail.com

Lu'lu'im Mansyuroh
IAIN Kediri
e-mail: lulukmansyuroh99@gmail.com

Choirum Minatun Hasanah
IAIN Kediri
e-mail: choirum1234@gmail.com

Abstract

Today's school-age children are also affected by technological developments that target other groups. The natural growth process of school-age children can be disrupted due to the use of gadgets. For this reason, it is necessary to have a motivation to learn so they can still carry out learning activities well. This study attempts to explain the relationship between student learning motivation and the intensity of using gadgets and student learning outcomes to explain the effect of using gadgets on student motivation and learning outcomes. This study uses a quantitative approach involving data in the form of numbers. The instruments used are questionnaires and documentation. Through a questionnaire, data will be obtained in the form of numbers which are then analyzed using an application. At the same time, documentation is used to support processes related to research. This study obtained the results that there was a significant relationship between the use of gadgets and students' learning motivation. This motivation is evidenced by a questionnaire or

questionnaire submitted to students, namely as respondents, after being tested for correlation. With the results shown from the results of this study, it is hoped that the use of gadgets is more directed and guided so that the motivation given can increase student enthusiasm in participating in learning.

Anak usia sekolah masa kini ikut terkena imbas perkembangan teknologi, yang juga menyasar kalangan lain. Proses tumbuh kembang alami anak usia sekolah dapat terganggu akibat penggunaan gadget. Untuk itu, perlu adanya motivasi belajar sehingga mereka tetap dapat melakukan aktivitas pembelajaran dengan baik. Penelitian ini berusaha menjelaskan keterkaitan motivasi belajar siswa dengan intensitas penggunaan gadget dan hasil belajar siswa, menjelaskan pengaruh pengaruh penggunaan gadget terhadap motivasi dan hasil belajar siswa. Penelitian ini menggunakan pendekatan kuantitatif yang melibatkan data berupa angka-angka. Instrumen yang digunakan berupa angket dan dokumentasi. Melalui angket, akan diperoleh data berupa angka-angka yang kemudian dianalisis dengan menggunakan aplikasi, sedangkan untuk dokumentasi digunakan untuk mendukung proses yang terkait dengan penelitian. Penelitian ini memperoleh hasil bahwa terdapat hubungan yang signifikan antara penggunaan gadget dengan motivasi belajar siswa. Hal ini dibuktikan dengan angket atau kuesioner yang diajukan kepada siswa yakni sebagai responden setelah di uji berkorelasi. Dengan hasil yang ditunjukkan dari hasil penelitian ini, diharapkan penggunaan gadget lebih diarahkan dan dibimbing, sehingga motivasi yang diberikan dapat meningkatkan antusias siswa dalam mengikuti pembelajaran.

Keywords: *Gadgets; Motivation; Learning Outcomes; Madrasah Ibtidaiyah*

Introduction

New devices, known as devices, are developing rapidly in line with the rapid and global development of technology. This technology does not make people feel surprised about it. This condition is very reasonable considering that most people crave convenience, and one of its manifestations is technological sophistication[1]. With the rapid development of technology, technology has become a necessity that humans must own to help solve their problems, one of which is the development of technology in

---

[1] Eka Anggraini, *Mengatasi Kecanduan Gadget Pada Anak* (Bogor: Serayu Publishing, 2019).

the form of gadgets. Gadgets are today's technological developments that target all groups, including preschool-age children[2].

Certain limitations and criteria must be established to regulate the use of gadgets. This limitation is to prevent addiction to using gadgets. The rest of what they do is put their gadgets aside for a moment by interacting with other people[3]. The frequency of using gadgets can be used to measure the intensity of using gadgets. This intensity can be observed in Kuru. Child psychology can be affected when using gadgets for more than 2-3 hours[4].

The main activities in school are teaching and learning activities. In order to maintain the enthusiasm for student learning, teachers must use various methods or media that support teaching, with the aim that students can take part in learning happily and not get bored so that student learning outcomes can increase. The existence of the media itself must be pursued[5], because sometimes the desired media is not available in class[6]. Learning motivation is one of the factors that can influence student success in learning. This motivation is so that students are more enthusiastic about learning and concentration increases in the learning process[7]. Changes in behavior after learning occur from internal and external encouragement, like learning motivation. Individual success plays a significant role when studying.

---

[2] Tri Puspita Sari and Dkk, "Pengaruh Penggunaan-Penggunaan Gedjet Terhadap Personal Sosial Anak Usia Pra Sekolah Di TKIT Al Mukmin," *Stikes PKU Muhammadiyah Surakarta* 13, no. 2 (2016).

[3] Anita Yus, *Pengembangan Nilai Moral Dan Agama Anak Usia Dini: Panduan Bagi Orang Tua, Guru, Mahasiswa, Dan Praktisi PAUD* (Tasikmalaya: Edu Publisher, 2020).

[4] Mahasiswa Tadris Matematika Angkatan 2019 (DPPM Kelas B), *Catatan Dasar Pembelajaran Matematika*, *2020* (Pekalongan: Nasya Expanding Management, n.d.).

[5] Kharisma Lisa Hada et al., "Pengembangan Media Pembelajaran Blabak Trarerodi Pada Materi Geometri Transformasi: Tahap Expert Review," *Jurnal Pendidikan Matematika* 4, no. 2 (2021): 155–78.

[6] Agus Miftakus Surur, *Pengembangan Media Pembelajaran* (Yogyakarta: K-Media, 2021).

[7] Ghullam Hamdu and Dkk, "Pengaruh Motivasi Belajar Siswa Terhadap Prestasi Belajar IPA Di Sekolah Dasar," *Universitas Pendidikan Indonesia* 12, no. 1 (2011).

The overall driving force within students that gives rise to teaching and learning activities is the importance of learning motivation, ensuring the continuity of learning activities, and directing learning activities so that the desired goals that have been planned at the beginning can be achieved[8]. Learning motivation will prepare students to conduct learning evaluations so that their learning outcomes can be known[9]. Increasing student success in participating in learning material in class can be called learning outcomes. Learning outcomes are presented as a score obtained after taking a test with several questions related to the material that has been studied[10]. The use of gadgets by students can influence motivation and learning outcomes; these gadgets are utilized by linking them to learning needs, such as looking for other references to the material to be studied. Students are expected to overcome the limitations of knowledge and information that the teacher cannot explain.

In the Covid 19 pandemic situation, learning is done to suppress the spread of the virus in education circles, especially among students. Online learning is also a form of keeping up with the times. At this madrasah, learning is also carried out using online learning; although it is not fully online, certain parts are carried out online. Submission of material is still carried out offline in class. Then the discussion continued on the WhatsApp group that the teacher had created. This group is one of the communication tools outside the classroom, so students can still ask questions and respond to material presented in class. If there are students who do not respond at all to the material, the teacher will remind them.

---

[8] Zafar Sidik and A. Sobandi, "Upaya Meningkatkan Motivasi Belajar Siswa Melalui Kemampuan Komunikasi Inter-Personal Guru," *Jurnal Pendidikan Manajemen Perkantoran* 3, no. 2 (2018).

[9] Agus Miftakus Surur, Moch. Erwin Wahyudi, and M Anggi Mahendra, "Upaya Meningkatkan Motivasi Belajar Siswa Melalui Metode Artikulasi Sebagai Perangsang Timbulnya Kompetensi," *Factor M: Focus ACTion Of Research Mathematic* 2, no. 2 (2020): 141–56.

[10] Agus Miftakus Surur, "Thorndike's Learning Theory Application for Improving Creative Thinking Abilities And Publications," *The Atlantis Press Proceedings*, 2020.

The teacher does the above as a form of concern for students so they can understand the material being studied. This way also makes the existence of gadgets as learning media very important. The advantage of having a gadget is to facilitate communication and to add insight[11]. If communication is established, it can trigger motivation because students feel cared for and if student insight increases, the student can get satisfying learning outcomes. Like the results of Harahap's research[12] there is a relevant positive influence between the use of gadgets and student learning outcomes. Besides that, research from Asmurti[13] The higher the intensity of using a smartphone, the higher the student is learning achievement. Conversely, the lower the intensity of smartphone use, the lower the student achievement. In addition, Sobon's research[14], there is an influence between the use of smartphones/gadgets on the learning motivation of elementary school students in the Mapanget District

With the elaboration above, the researcher wants to raise the title "The Effect of Using Gadgets on the Motivation and Learning Outcomes of Class VI Students in the Al-Quran Hadith Subject at MI Al Muwazanah Kediri" because researcher want to know how much influence gadgets have on the learning process of students.

Research Method

This research was designed using a quantitative approach. The research begins with analyzing existing problems related to learning using

---

[11] Habibu Rahman, Rita Kencana, and Nur Faizah, *Pengembangan Nilai Moral Dan Agama Anak Usia Dini* (Tasikmalaya: Edu Publisher, 2020).

[12] Rizky Septia Harahap, Rosma Elly, and Intan Sofiah, "Pengaruh Peggunaan Gadget Terhadap Hasil Belajar Siswa Kelas V SD Negeri 12 Banda Aceh," *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar KIP Unsyiah* 3, no. 1 (2018).

[13] Asmurti, Andi Alimuddin Unde, and Tawany Rahamma, "Dampak Penggunaan Smartphone Di Lingkungan Sekolah Terhadap Prestasi Belajar Siswa," *Jurnal Komunikasi KAREBA* 6, no. 2 (2017).

[14] Kosmas Sobon, Jelvi M. Mangundap, and Stief Walewangko, "Pengaruh Penggunaan Smartphone Terhadap Motivasi Belajar Siswa Sekolah Dasar Di Kecamatan Mapanget Kota Manado," *Jurnal Auentik* 3, no. 2 (2019).

gadgets. Then look for the impact of using the gadget. The results obtained will prove the truth of the things that have happened by conducting research. The research began by giving treatment to the class using gadgets. At the end of the lesson, students are given a test to measure the test, and questionnaires are distributed to see motivation.

According to Carnines and Zeller, quantitative research is research in which data is expressed in numbers and analyzed using analytical techniques[15]. Quantitative research uses numerical data as material for statistical analysis[16]. Following the predetermined title, this research is quantitative, and the data uses numbers and statistical analysis. Where in this study, researchers will examine the influence arising from the use of gadgets (variable x) on the motivation and learning outcomes of students (variable y).

Population and Sample

The population of this study is in MI Al Muwazanah Kediri, in class VI. The location is in the village of Gondang, Plosoklaten, Kediri. The reason for conducting research at MI Al Muwazanah is that gadgets are used by students for learning and also for entertainment. The learning results will be seen for those related to learning, while during the learning process, the learning motivation will be seen.

The population must be able to show the characteristics of the subject or object to be studied[17]. The sampling technique used is a non-probability sampling technique, namely a sampling technique that does not provide

---

[15] Al-Nizar and Siti Hajaroh, "Pengaruh Intensitas Penggunaan Game Gadget Terhadap Minat Belajar Siswa," *El-Midad: Jurnal PGMI* 11, no. 2 (2019).

[16] Agus Miftakus Surur, "Standart Kinerja Pengajaran Dosen Pendidikan Matematik," *Factor M* 2, no. 1 (2019).

[17] Ismail Nurdin and Sri Hartati, *Metodologi Penellitian Sosial* (Surabaya: Media Sahabat Cendekia, 2019).

equal opportunities for each element or member of the population to be selected as a sample[18].

The population in this study were students of class VI MI Al-Muwazanah Kediri City in the odd semester, totaling 32 children. The sample of this study was class VI, with a total sample of 30 students. The technique used to take samples in this study uses the Slovin formula.

$$n = \frac{N}{1 + N.e^2} = \frac{32}{1 + ((32(0,05)^{2)}} = \frac{32}{1,08} = 29,629 \approx 30$$

The number of samples in the study was 30.

If the population is less than 100, it is better to take samples from the entire population[19]. This study did not use 32 students as a sample to anticipate when students are absent from learning.

Instrument Collection and Development Techniques

Data collection was adjusted to the research object[20]. In this study, data were obtained using instruments. The prepared instruments will be given to respondents[21]. An *instrument* is a tool used to obtain data. In this study, the instruments used were questionnaires and test questions. Questionnaires are used to see the state of student motivation in learning by using gadgets, while test questions are used to see the results of the learning carried out.

The assessment or scoring is based on the following statement:

Strongly agree answer : score 5
Agree answer : score 4
Neutral/ordinary answer : score 3
Disagree answer : score 2
Strongly disagree answer : score 1

---

[18] Sugiyono, *Metode Penelitian Kuantitatif Kualitatif Dan R&D* (Bandung: Alfabeta, 2015).

[19] Suharsimi Arikunto, *Research Procedure a Practical Approach* (Yogyakarta: Rineka Cipta, 2010).

[20] Agus Miftakus Surur, "Formasi 4-1-5 Penakhluk Masalah (Studi Kasus: Penulisan Karya Tulis Ilmiah Proposal Skripsi STAIN Kediri 2017)," *PROSIDING SEMINAR NASIONAL PPKn III*, 2017, 1–8.

[21] Sri Pujilestari, "Efektivitas Pembelajaran Matematika Berbasis Open-Ended Problem Dengan Model Think-Pair- Share Terhadap Kemampuan Berpikir Kreatif," *Factor M: Focus ACTion Of Research Mathematic* 1, no. 1 (2018).

The questionnaire was developed based on theories related to indicators of learning motivation, as well as examples from questionnaires from previous research. Then the questionnaire that has been compiled is tested for its validity by experts in that field. At the same time, the test questions are prepared based on the material that has been studied using gadgets. The questions are planned to be 5-10 questions by looking at the material depth and the level of students' responses to the material. The test questions were also tested for validity by an expert.

Valid questionnaires were then given to students who had attended the lesson. If there are no obstacles, the questionnaire will be distributed in class, and if this is not possible, the questionnaire will be converted into a Google form that students can fill out online. Specifically, the test will be carried out in class directly. This test is to keep students' answers that come from their answers.

Data analysis technique

The data used is standard and homogeneous data after checking each test. The instrument is valid if it can provide an accurate picture. The level of instrument validity influences instrument validation. The validity test was carried out using product correlation. The test formula will use application assistance, namely Ms. Excel or SPSS.

Data analysis techniques test the proposed hypotheses and answer the problem formulation. This study used correlation analysis, regression analysis, and determination. The correlation test is intended to determine the closeness of the relationship between the two variables studied. At the same time, the regression analysis is intended to determine the form of the relationship between variable Y and the value of variable X.

In this case, steps are carried out using Microsoft Excel. The stages are as follows:

a. Correlation Test (Product Moment Correlation)

A correlation test is a technique to find a correlation between two variables that are often used. This correlation technique was developed by Karl Pearson and is often known as the Pearson correlation technique. It is called the Product Moment Correlation because the correlation coefficient is obtained by looking for the multiplication of the moments of the correlated variables[22]. This technique can be used if the reality of the data is as follows[23]:

The following formula is used in correlation:

$$r_{xy} = \frac{\sum xy}{\sqrt{(\sum x^2)(\sum y^2)}}$$

Glossary:

r_{xy} = the correlation coefficient sought

$\sum xy$ = the sum of the multiplication of x and y score

$\sum x^2$ = the sum of the difference between X and Ẋ score squares

$\sum y^2$ = the sum of the difference between Y and Ẏ score squares

The expected r value is a significant r score, namely the empirical value or what we often call a calculated r that is greater or more than theoretical r, which is contained in the table of r values. By looking at the number of N, then we conclude that if r count ≥ r table means there is a significant difference between the variants.

b. Regretion Test

Regression analysis is used to examine the relationship between two or more variables, especially to trace patterns of relationships whose models are not entirely known or to find out how variations of several independent variables affect the dependent variable in a complex phenomenon. Regression analysis aims to study the

---

[22] Anas Sudijiono, *Pengantar Statistik Pendidikan* (Jakarta: Raja Grafindo Persada, 2012).

[23] Agus Irianto, *Statistik Konsep Dasar Dan Aplikasinya* (Jakarta: Kencana Prenada Miiiedia Group, 2007).

relationship between two variables. Regression analysis is used in the formula:

$$\hat{Y} = \acute{\alpha} + bx$$

Glossary:
$\hat{Y}$: dependent variable
x : iddependent variable
a : estimator for intercept (a)
b : estimator for the regression coefficient (β)
he formula that can be used to find a and b is:

$$a = \frac{\sum Y - b \sum X}{N} = \hat{Y} - b\dot{X}$$
$$b = \frac{N.(\sum XY) - \sum X \sum Y}{N.\sum X^2 - (\sum X)^2}$$

Glossary:
X : the average score of variable X
Y : the average score of variable Y

c. Determination Test

The determination test is used to determine the quantity value of the influence of a variable[24]. o find out the percentage of determination (influence) of the gadget use variable (x) on the variables of learning motivation and learning achievement (y) can be seen from the regression statistics table below.

Results and Discussion of Findings

Finding

1. Pre-research

In pre-research activities, field observations were carried out. The observation results show that learning at MI Al-Muwazanah Kediri is currently being carried offline for the Covid-19 period. However, online learning is still sometimes carried out by some teachers. Online learning is adjusted to the material taught because students cannot complete online

---

[24] Eka Sulistyawati, "Pembelajaran Matematika Dengan Pendekatan Konstekstual Berbasis Budaya Lokal Untuk Siswa Sekolah Menengah Pertama," *Factor M: Focus ACTion Of Research Mathematic* 1, no. 1 (2018).

learning in one semester. After all, there is a policy. From learning that is done online and also offline, information is obtained.

The result is that students' enthusiasm for participating in online and offline learning is the same; those who are active and those who are less active are the same students. Learning is required to be done offline because it increases interaction between teachers and students, but the results are the same as online learning. Results that are also felt from student learning outcomes obtained similar values between offline or online learning; the difference is not too far. The average offline learning score is 79, while online learning is 77.8.

Based on learning procedures between online and offline, offline learning requires more preparation that must be met, so the results should be more significant than online learning. Online learning, it can be done at home, or it can be done anywhere, as long as the internet network is smooth. When online learning is widely used are gadgets. Gadgets can be used for online learning, although later, they will compete with other applications, such as games. If playing games on gadgets, students are enthusiastic, and learning with gadgets should also be more motivated. From this, researchers are interested in knowing the effect of gadgets on motivation and student learning outcomes.

2. Research Implementation

After formulating the problem, the researcher compiled the instruments to be used in the study, namely compiling a questionnaire to measure student motivation and test sheets. Completed questionnaires and test sheets are then given to the validator to determine the instrument's validity. The results of the validator provide several inputs, including the questionnaire that needs to be written operationally, not using adjectives. Then for the test sheet, the researcher needs to change question number 4 because it does not match the school level. After revision, the instrument

can be used to obtain data. The following is the data from the questionnaire results and student learning outcomes.

Table 1.
Questionnaire results and learning outcomes

Respondent	Use of gadget (X1)	Learning motivation (X2)	Learning outcomes (Y)
1	29	34	78
2	21	30	76
3	15	33	88
4	23	33	78
5	24	45	88
6	27	40	85
7	20	40	85
8	22	42	99
9	23	35	88
10	35	41	85
11	24	42	80
12	28	41	87
13	30	38	85
14	26	34	79
15	25	36	80
16	24	39	83
17	28	45	79
18	33	48	78
19	26	50	80
20	25	46	82
21	35	50	85
22	28	49	80
23	28	48	83
24	37	46	77
25	30	40	75
26	11	10	80
27	31	38	89
28	30	40	90
29	20	36	87
30	30	38	86
Total	788	1153	2495

After the data is tabulated, the data is tested, and statistical tests are done with the help of Ms. Excel. The following regression test is used to determine the influence between variables. Here are the results.

Table 2.
Summary Model Result

Summary Model				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.248a	0.62	-.008	5.20061
a. Predictors: (Constant), Students' learning motivation, Use of gadget				

Then, to determine each variable's effect, using Ms. Excel, here are the results.

Table 3.
Correlation between Variables

	Use of gadget (X1)	Learning motivation (X2)	Learning outcome (Y)
Use of gadget (X1)	1		
Learning motivation (X2)	0.652808644	1	
Learning outcome (Y)	-0.133976789	0.070756925	1

Furthermore, finding the equation of the regression produces the following table.

Table 4.
Anova Table

ANOVA					
	df	SS	MS	F	Significance F
Regression	2	47.91431	23.95716	0.88578	0.424038
Residual	27	730.2524	27.04638		
Total	29	778.1667			

Table 5.
Regression Equation Table

	Coefficients	Standard Error	t Stat	P-value	Lower 95%	Upper 95%	Lower 95.0%	Upper 95.0%
Intercept	83.46421	5.253003	15.88886	3.17E-15	72.68594	94.24248	72.68594	94.24
Use of gadget	-0.2863	0.224415	-1.27574	0.212914	-0.74676	0.174166	-0.74676	0.17
Learning motivation	0.18254	0.162935	1.12032	0.272444	-0.15178	0.516855	-0.15178	0.52

Discussion

Data Interpretation

Table 2.
Summary Model Result

Summary Model				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.248a	0.62	-.008	5.20061
a. Predictors: (Constant), Students' learning motivation, Use of gadgett				

After the research data has been analyzed, the steps taken by the next researcher are to interpret the data that has been analyzed previously. Based on table 2, "Summary Model" above, the value of R square or R2 is obtained, where R square is the value that indicates the percentage contribution of the independent variable in influencing the dependent variable, while other variables influence the rest. The R square value of 0.062 means that the contribution of the independent variables in influencing the dependent variable is 62%, while other variables influence the remaining 38%. This figure implies that the variable use of gadgets affects the variables of learning motivation and student learning outcomes by 62%.

This analysis is in line with the results of research conducted by Nurmalsari and Devi Wulandari in 2018, with a percentage yield of 5.5%. Then Arif Rifan Hidayat and Erfian Junianto conducted research in 2017 with a percentage result of 97.7%. Then Maya Ferdiana Rozalia conducted research in 2017 with a percentage of 67%. Then Chusna Oktia Rohmah in 2017 with a presentation result of 42.1%. The research was conducted by Larasati Aurora Arifin and Farid Agung Rahmadi in 2017 with a percentage of 38.8%. Moreover, research by Mitna Intan Sari in 2018 showed a percentage result of 85%.

Table 2 already shows that there is an influence from the use of gadgets on motivation and learning outcomes. Then the researcher wants to show the amount of influence on each variable. The following are the results of the influence on each variable.

Table 3.

Correlation between Variable

	Use of Gadget (X1)	Learning motivation (X2)	Learning outcome (Y)
Use of gadget (X1)	1		
Learning motivation (X2)	0.652808644	1	
Learning outcome (Y)	-0.133976789	0.070756925	1

Table 3 shows the relationship between variables. Table 3 shows the relationship between the use of gadgets and learning motivation to obtain a result of 0.65, which means that using gadgets affects student motivation. In contrast, using gadgets for learning outcomes does not get significant results, obtaining negative results. Then the relationship between motivation and learning outcomes, the results are insignificant, namely obtaining a result of 0.07. This relation shows that motivation and learning outcomes are different and not interdependent, and this is under the research that there is no chain effect.

The results of research that has been carried out by researchers, as well as the results of previous research, it can be concluded that the use of gadgets influences motivation and learning outcomes. Gadgets can have an impact because, at first, students have yet to be able to use gadgets as a medium for learning. Sometimes when students come home from school and are at home, they play with gadgets. This medium can be likened to a gadget as a game used. So that students can master the game and not be mastered by the game[25]. With teachers learning using gadgets, the use of gadgets that were initially only used for entertainment is turned into gadgets that can be used in learning. Students who study using gadgets can learn anytime and anywhere, so students are more motivated to participate in learning.

---

[25] Agus Miftakus Surur, "Application of Monopoly Media to Improve Readiness for Class VI Students in Facing the National Examination of Mathematics Learning," *International Journal of Pedagogical Development and Lifelong Learning* 4, no. 1 (2022).

Table 5.
Regression Equation Table

	Coefficients	Standard Error	t Stat	P-value
Intercept	83.46421	5.253003	15.88886	3.17E-15
Use of gadget	-0.2863	0.224415	-1.27574	0.212914
Learning motivation	0.18254	0.162935	1.12032	0.272444

From table 5, the regression equation is obtained:

$$Y = 83{,}46 - 0{,}29.X1 + 0{,}18.X2$$

From the equation above, there is a constant of 83.46, which means that the variable yes has this value if X1 and X2 are 0; for the value of X1, it will decrease by 0.29 for every one unit of X1, and the value of X2 will increase by 0.18 for every one unit of X2.

One of the current technological developments that target all groups, including pre-school-aged children, is gadgets[26]. The positive impact of gadgets on children is increasing knowledge, expanding friendship networks, facilitating communication, training children's creativity, adapting to the times, and developing imagination. Besides having a positive impact, of course, the use of gadgets in children also has a negative impact. There are several negative impacts of using gadgets for children, such as disturbing children's development, disturbing health, dependence, children not socializing enough, and disturbing rest time[27]. Restrictions on using gadgets must be given to anyone who uses them. This limitation is to prevent addiction arising from excessive use. The main activity is interacting directly with other people. The level of frequency of using

[26] Sari and Dkk, "Pengaruh Penggunaan-Penggunaan Gedjet Terhadap Personal Sosial Anak Usia Pra Sekolah Di TKIT Al Mukmin."

[27] Rahman, Kencana, and Faizah, *Pengembangan Nilai Moral Dan Agama Anak Usia Dini*.

gadgets can be a measure of the intensity of gadget users. If the use of gadgets for more than 2-3 hours will affect the child's psychology[28].

Motivation as additional energy as a driving force for student activity in learning[29]. The process of starting can also be interpreted as motivation, starting with a physiological or psychological drive or need[30]. *Learning motivation* is defined as the driving force within students which creates learning activities, guarantees the continuity of learning activities, and provides direction for learning activities so that the goals desired by the learning subjects can be achieved[31]. Evidence that a person has carried out teaching and learning activities and a behavior change occurred in a person can be seen from the results of learning; those who initially did not know became aware of something, which started from ignorance to understanding something[32]. This learning can make these changes due to interactions[33]. Factors that influence learning outcomes are internal factors and external factors[34].

Amelia & Nugraha stated that when the gadget is not in the hands of the child, he will continue to ask for the gadget. If this happens, it can be said that the child is addicted to gadgets. If the child is already dependent on gadgets, it will affect the learning process. However, even so, the use of appropriate and disciplined gadgets also positively impacts students because they can be used to find information and subject matter needed by

---

[28] Mahasiswa Tadris Matematika Angkatan 2019 (DPPM Kelas B), *Catatan Dasar Pembelajaran Matematika*.

[29] Agus Miftakus Surur et al., "Problematika Pembelajaran Siswa MTs Sunan Gunung Jati (Studi Kasus Latar Belakang Siswa Menghadapi Ujian)," *Edudeena* 1, no. 1 (2018): 13–32.

[30] Tati Nurhayati, "Hubungan Kepemimpinan Transformasional Dan Motivasi Kerja," *Jurnal Edueskos* 1, no. 2 (2012).

[31] Ricardo and Rini Intansari Meilani, "Impak Minat Dan Motivasi Belajar Terhadap Hasil Belajar Siswa," *Jurnal Mana-Jemen Perkantoran* 2, no. 2 (2017).

[32] Hamalik, *Proses Belajar Mengajar* (Bandung: Bumi Aksara, 2008).

[33] Agus Miftakus Surur and Kharisma Nur Cholifah, "Good Governance Pada Kepengurusan Pondok Pesantren Putri Al-Amien," *Al-Tadzkiyyah: Jurnal Pendidikan Islam* 9, no. 2 (2018): 261–74.

[34] Hendra Dani Saputra, Faisal Ismet, and Andriza, "Pengaruh Motivasi Terhadap Hasil Belajar Siswa SMK"," *Jurnal Inovasi Vokasional Dan Teknologi* 18, no. 1 (2018).

students[35]. These days with online-based learning, likening gadgets and learning is an inseparable relationship, like the relationship of odd-even numbers that are different but in pairs[36]. Learning resources can be found anywhere and through anything, not only focusing on books but can also be done through online sources that can be accessed easily through gadgets.

Conclusion

After conducting research and analysis regarding the effect of using gadgets on learning motivation and learning outcomes, it can be concluded that there is a significant relationship between using gadgets and student learning motivation. The influence given is also more than 50% on motivation and learning outcomes. When broken down per variable, it turns out that gadgets only influence motivation because they are based on students' initial habits when using gadgets only for entertainment; however, learning motivation increases after being used in learning. As for the learning outcomes variable, gadgets do not provide significant results. Thus, the use of gadgets is appropriate for increasing student motivation.

Based on the conducted research conclusions, the authors describe some suggestions that are expected to be helpful in the following. For parents and teachers, it is necessary to assist children in using gadgets so as not to cause negative effects from using these gadgets. The use of gadgets has both a positive and negative impact, for parents should give appropriate freedom to children in using gadgets. Parents also need always to supervise and monitor children when using gadgets. Therefore, parents must limit their children's use of gadgets so as not to cause addiction tendencies to play with gadgets.

---

[35] Dian Kurniawati, "Pengaruh Penggunaan Gadget Terhadap Prestasi Siswa," *Edukatif: Jurnal Ilmu Pendidikan* 2, no. 1 (2020).

[36] Agus Miftakus Surur and Sri Pujilestari, "The Relevance of Odd-Even Verses in The Qur'an with Mathematics Education," *Jurnal At-Tibyan: Jurnal Ilmu Alqur'an Dan Tafsir* 6, no. 2 (2021).

Teachers and prospective teachers should pay more attention to the characteristics of their students because this can also affect student motivation and learning outcomes. In addition, teachers and prospective teachers must also understand various learning methods and strategies and develop learning media according to student characteristics. Teachers and prospective teachers must master class conditions and how to liven up the classroom atmosphere so all students can be active in the learning process. Learning that attracts students' learning interest will also generate student learning motivation so that student learning outcomes can also increase.

Bibliography

Al-Nizar, and Siti Hajaroh. "Pengaruh Intensitas Penggunaan Game Gadget Terhadap Minat Belajar Siswa." *El-Midad: Jurnal PGMI* 11, no. 2 (2019).

Anggraini, Eka. *Mengatasi Kecanduan Gadget Pada Anak*. Bogor: Serayu Publishing, 2019.

Arikunto, Suharsimi. *Prosedur Penelitian Suatu Pendekatan Praktik*. Jakarta: PT. Rineka Cipta, 2006.

Arikunto, Suharsimi. *Research Procedure a Practical Approach*. Yogyakarta: Rineka Cipta, 2010.

Asmurti, Andi Alimuddin Unde, and Tawany Rahamma. "Dampak Penggunaan Smartphone Di Lingkungan Sekolah Terhadap Prestasi Belajar Siswa." *Jurnal Komunikasi KAREBA* 6, no. 2 (2017).

Hada, Kharisma Lisa, Fitriana Ika Maulida, Aisyah Susmita Dewi, Checylya Kharisma Dewanti, and Agus Miftakus Surur. "Pengembangan Media Pembelajaran Blabak Trarerodi Pada Materi Geometri Transformasi: Tahap Expert Review." *Jurnal Pendidikan Matematika* 4, no. 2 (2021): 155–78.

Hamalik. *Proses Belajar Mengajar*. Bandung: Bumi Aksara, 2008.

Hamdu, Ghullam, and Dkk. "Pengaruh Motivasi Belajar Siswa Terhadap Prestasi Belajar IPA Di Sekolah Dasar." *Universitas Pendidikan*

Indonesia 12, no. 1 (2011).

Harahap, Rizky Septia, Rosma Elly, and Intan Sofiah. "Pengaruh Peggunaan Gadget Terhadap Hasil Belajar Siswa Kelas V SD Negeri 12 Banda Aceh." *Jurnal Ilmiah Pendidikan Guru Sekolah Dasar KIP Unsyiah* 3, no. 1 (2018).

Irianto, Agus. *Statistik Konsep Dasar Dan Aplikasinya*. Jakarta: Kencana Prenada Miiiedia Group, 2007.

Kurniawati, Dian. "Pengaruh Penggunaan Gadget Terhadap Prestasi Siswa." *Edukatif: Jurnal Ilmu Pendidikan* 2, no. 1 (2020).

Mahasiswa Tadris Matematika Angkatan 2019 (DPPM Kelas B). *Catatan Dasar Pembelajaran Matematika. 2020*. Pekalongan: Nasya Expanding Management, n.d.

Nurdin, Ismail, and Sri Hartati. *Metodologi Penellitian Sosial*. Surabaya: Media Sahabat Cendekia, 2019.

Nurhayati, Tati. "Hubungan Kepemimpinan Transformasional Dan Motivasi Kerja." *Jurnal Edueskos* 1, no. 2 (2012).

Pujilestari, Sri. "Efektivitas Pembelajaran Matematika Berbasis Open-Ended Problem Dengan Model Think-Pair- Share Terhadap Kemampuan Berpikir Kreatif." *Factor M: Focus ACTion Of Research Mathematic* 1, no. 1 (2018).

Rahman, Habibu, Rita Kencana, and Nur Faizah. *Pengembangan Nilai Moral Dan Agama Anak Usia Dini*. Tasikmalaya: Edu Publisher, 2020.

Ricardo, and Rini Intansari Meilani. "Impak Minat Dan Motivasi Belajar Terhadap Hasil Belajar Siswa." *Jurnal Mana-Jemen Perkantoran* 2, no. 2 (2017).

Saptono, Yohanes Joko. "Motivasi Dan Keberhasilan Belajar Siswa." *Jurnal Pendidikan Agama Kristen* 1, no. 1 (2016).

Saputra, Hendra Dani, Faisal Ismet, and Andriza. "Pengaruh Motivasi Terhadap Hasil Belajar Siswa SMK"." *Jurnal Inovasi Vokasional Dan Teknologi* 18, no. 1 (2018).

Sari, Tri Puspita, and Dkk. "Pengaruh Penggunaan-Penggunaan Gedjet Terhadap Personal Sosial Anak Usia Pra Sekolah Di TKIT Al Mukmin." *Stikes PKU Muhammadiyah Surakarta* 13, no. 2 (2016).

Sidik, Zafar, and A. Sobandi. "Upaya Meningkatkan Motivasi Belajar Siswa Melalui Kemampuan Komunikasi Inter-Personal Guru." *Jurnal Pendidikan Manajemen Perkantoran* 3, no. 2 (2018).

Sobon, Kosmas, Jelvi M. Mangundap, and Stief Walewangko. "Pengaruh Penggunaan Smartphone Terhadap Motivasi Belajar Siswa Sekolah Dasar Di Kecamatan Mapanget Kota Manado." *Jurnal Auentik* 3, no. 2 (2019).

Sudijiono, Anas. *Pengantar Statistik Pendidikan*. Jakarta: Raja Grafindo Persada, 2012.

Sugiyono. *Metode Penelitian Kuantitatif, Kualitatif, Dan R&D*. Bandung: Alfabeta, 2014.

Sugiyono. *Metode Penelitian Kuantitatif Kualitatif Dan R&D*. Bandung: Alfabeta, 2015.

Sulistyawati, Eka. "Pembelajaran Matematika Dengan Pendekatan Konstekstual Berbasis Budaya Lokal Untuk Siswa Sekolah Menengah Pertama." *Factor M: Focus ACTion Of Research Mathematic* 1, no. 1 (2018).

Surur, Agus Miftakus. "Application of Monopoly Media to Improve Readiness for Class VI Students in Facing the National Examination of Mathematics Learning." *International Journal of Pedagogical Development and Lifelong Learning* 4, no. 1 (2022).

Surur, Agus Miftakus. "Formasi 4-1-5 Penakhluk Masalah (Studi Kasus: Penulisan Karya Tulis Ilmiah Proposal Skripsi STAIN Kediri 2017)." *PROSIDING SEMINAR NASIONAL PPKn III*, 2017, 1–8.

Surur, Agus Miftakus. *Pengembangan Media Pembelajaran*. Yogyakarta: K-Media, 2021.

Surur, Agus Miftakus. "Standart Kinerja Pengajaran Dosen Pendidikan Matematik." *Factor M* 2, no. 1 (2019).

Surur, Agus Miftakus. "Thorndike's Learning Theory Application for Improving Creative Thinking Abilities And Publications." *The Atlantis Press Proceedings*, 2020.

Surur, Agus Miftakus, and Kharisma Nur Cholifah. "Good Governance Pada Kepengurusan Pondok Pesantren Putri Al-Amien." *Al-Tadzkiyyah: Jurnal Pendidikan Islam* 9, no. 2 (2018): 261–74.

Surur, Agus Miftakus, and Sri Pujilestari. "The Relevance of Odd-Even Verses in The Qur'an with Mathematics Education." *Jurnal At-Tibyan: Jurnal Ilmu Alqur'an Dan Tafsir* 6, no. 2 (2021).

Surur, Agus Miftakus, Abdul Hafid Rosyidi, Yanuar Adi Prasetia, Khozinatul Asrori, and Latifatul Azizah. "Problematika Pembelajaran Siswa MTs Sunan Gunung Jati (Studi Kasus Latar Belakang Siswa Menghadapi Ujian)." *Edudeena* 1, no. 1 (2018): 13–32.

Surur, Agus Miftakus, Moch. Erwin Wahyudi, and M Anggi Mahendra. "Upaya Meningkatkan Motivasi Belajar Siswa Melalui Metode Artikulasi Sebagai Perangsang Timbulnya Kompetensi." *Factor M: Focus ACTion Of Research Mathematic* 2, no. 2 (2020): 141–56.

Winkel. *Psikologi Pengajaran*. Jakarta: Erlangga, 1996.

Yus, Anita. *Pengembangan Nilai Moral Dan Agama Anak Usia Dini: Panduan Bagi Orang Tua, Guru, Mahasiswa, Dan Praktisi PAUD*. Tasikmalaya: Edu Publisher, 2020.