**ISTAWA: Jurnal Pendidikan Islam (IJPI)**

P-ISSN: 2502-573; E-ISSN: 2541-0970

Year, Vol. xx No. x

http://journal.umpo.ac.id/index.php/istawa/

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**The Effect of the Use of Gadgets on PAI Learning Outcomes at SDN 2 Dwijaya, Musi Rawas Regency**

**Nyandi Widiyanti, Romelah, Dina Mardiana**

Universitas Muhammadiyah Malang

[**widiyantinyandi@gmail.com**](mailto:widiyantinyandi@gmail.com)**,** [**romlah@umm.ac.id**](mailto:romlah@umm.ac.id)**,** [**dinamardiana@umm.ac.id**](mailto:dinamardiana@umm.ac.id)

# ABSTRACT

This study aims to analyze the effect of the use of gadgets on the learning outcomes of Islamic Religious Education (PAI) in elementary school students. In the growing digital era, gadgets have become an almost inseparable tool in everyday life, including in learning activities. The use of gadgets can have both positive and negative impacts on students' learning process. The positive impacts include wider access to learning materials, interactive educational applications, and ease of communication and collaboration. However, uncontrolled use of devices also has the potential to reduce students' concentration and focus, thus affecting their understanding of PAI materials. This study uses a quantitative approach by taking a sample of all students in grades IV and V of SDN 2 Dwijaya Musi Rawas to objectively measure the relationship between the variables of device use and PAI learning outcomes, data analysis is carried out through reliability and validity tests so that accountable data is obtained. As well as descriptive analysis to measure the extent to which the use of gadgets affects PAI learning outcomes. T test was also conducted which aims to measure whether or not there is an influence of the use of gadgets on PAI learning outcomes. The results showed that the proper use of gadgets can increase students' motivation and understanding of PAI materials, but excessive and undirected use actually reduces learning outcomes. Therefore, an effective strategy is needed in utilizing devices as a learning medium that supports optimal learning outcomes..

**Keywords: Gadget, Learning Outcomes, and PAI**

# INTRODUCTION

The development of digital technology has brought great changes in various aspects of life, including in the world of education. Gadgets are one of the fastest growing technologies today. (Apsari et al., 2023). Gadgets are considered a tool that can facilitate everything because of its many functions (Widiawati, 2014). In addition, gadgets are generally considered as an electronic device with specific functions for each device. (Rosiyanti & Muthmainnah, 2018). Gadgets can make it easier for humans to communicate and find information and support the learning process. Gadgets in their use also have an impact on the process of students in learning. The development of technology is a significant trend in the context of education, changing the traditional learning paradigm towards a more dynamic and interactive approach.

The use of technology in PAI education and learning is progressing rapidly, characterized by the use of various digital tools to improve the quality of teaching and student learning. (A. Rayhani, Wahyu Hanapi, 2024). The existence of digital learning resources, interactive applications and educational videos can actually help students to understand religious concepts in a more modern way and relevant to their lives. The utilization of knowledge in educational technology as a tool or tools to achieve the results of the desired learning objectives. However, optimizing the use of devices in PAI learning is still a challenge, as it requires proper guidance and supervision so that it does not turn into a distraction. (Azhar et al., 2024).

The use of gadgets or electronic devices can include computers, laptops, tablets, and cell phones or smartphones. (Rahayu R, 2018) are increasingly common among primary school students. They provide easy and quick access to a variety of information and learning resources. They can be used by students as a tool to enhance their knowledge of current technological developments, ensuring that they keep abreast of the advancements taking place in the current era. They can also be utilized as interactive and engaging learning media if used correctly. They can help students learn about a variety of topics, such as finding information about material that is considered difficult. (Harmain, 2022)

In schools, devices are often used to search for teaching materials, access learning videos, and attend online classes. This interaction between students and digital teaching materials can be one of the foundations of contemporary learning that brings benefits (Ripai & Ropiah, 2023). On the other hand, the use of these devices can raise concerns regarding their impact on students' concentration, motivation, and learning outcomes, including in Islamic Religious Education (PAI) subjects. The positive and negative effects of learning with digital media as a result of technological development can be seen as a tool of freedom, truth and educational innovation.(Yuliani & Hartanto, 2022)

The negative impacts of using gadgets include (1) Applications on gadgets make a person more self-centered. Often people ignore other people, sometimes not even considering people who invite them to talk; (2) A person becomes addicted to playing gadgets; (3) Gadgets allow teenagers to access various sites that should not be accessed; (4) Social media on gadgets often causes cases such as bullying, kidnapping, and rape, which usually start with introductions on social media; (5) Gadgets make teenagers lazy to move and do activities, making it difficult to learn social skills and their abilities (Harfiyanto et al., 2015) he positive impacts of using gadgets include: (1) Facilitating interaction and communication with many people, making it easier to expand friendships and get to know new people; (2) Shortening distance and time; (3) Enabling long-distance relationships without barriers thanks to the sophistication of applications available on devices; (4) Assisting

students in consulting lessons and assignments that have not been understood (Muhammad Iqbal Ulil Amri, Reza Syehma Batiar, 2021).

Instead of being utilized for learning purposes, some students use devices for less productive purposes, such as playing games, accessing social media, or consuming content that does not support learning such as hoax information that will affect the learning process (Siregar et al., 2024) Learners who frequently use devices will experience problems in their learning process and can interfere with their interpersonal skills (Nurmalasari & Wulandari, 2018). Another impact that also affects students' learning outcomes is when students rely more on gadgets than having to study with books, so that they will become dependent on using gadgets (Harfiyanto et al., 2015). Gadget dependence can also cause excessive anxiety if the student is kept away from gadgets, brain health becomes disturbed, becomes more introverted, has difficulty socializing, likes to be alone, has oversized behavior and fades creativity and students tend to be less creative again. (Domitila et al., 2021)

In contrast to the digital type in the interactive multimedia group that has the main elements of text, graphics, audio, video and animation allows users to control the context they see, so as to provide a richer experience by actively involving users in the content.. (Junpahira & Pahlevi, 2023)

The American Academy of Pediatrics (2016) states that the ideal duration of device use for elementary school-age children should not exceed two hours per day. This means that the maximum limit of device use for elementary school students is two hours a day. If students use devices for more than two hours, then it is considered excessive or inappropriate. (Oktafia et al., 2021). The duration of device use can be categorized into three types: a) high use, which is when the device is used for more than 3 hours per day, b) moderate use, which is when the device is used for about 3 hours per day, c) low use, which is when the device is used for less than 3 hours per day. Excessive and prolonged use of devices can adversely affect health, disrupt brain development, and reduce children's interest in various activities and learning, potentially negatively affecting learning outcomes. (Ni Putu Wahyu Sanjiwani1, et al., 2020).

In addition, the lack of supervision from teachers and parents regarding the use of devices during the learning process adds to the complexity of this problem. In some cases, students become more dependent on instant information from the internet rather than delving deeply into the teaching

material. Thus, it is important to further examine how the use of gadgets can affect student learning outcomes in Islamic Religious Education, both from positive and negative aspects.

Learning outcomes are the abilities that students have after experiencing learning experiences, which include cognitive, affective, and psychomotor aspects. Evaluation activities are designed to collect evidentiary data that shows how well students have achieved learning objectives (Puslitjak, Kemendikbud, 2020). The objectives of assessing learning outcomes are as follows: 1) Identifying the level of student mastery of the material taught; 2) Evaluate students' abilities, motivation, talents, interests, and attitudes towards learning programs; and 3) Evaluate the progress and suitability of student learning outcomes with predetermined competency standards; 4) Identify students' strengths and weaknesses in participating in learning activities; student excellence can be the basis for teachers to provide further coaching and development, while student weaknesses can be the basis for teachers to offer assistance or guidance; 5) Conduct selection, namely selecting students who are suitable for certain types of education; 6) Determine grade promotion; 7) Placing students according to their potential (Kodir, 2015).

Learning objectives include changes that need to be achieved by students according to Benjamin S. Bloom's taxonomy, namely the cognitive, affective and psychomotor domains (Kementrian Agama RI, 2015)**.** The Cognitive domain is divided into six mutually integrated levels, starting from the most basic to the most complex, or from the simplest to the most complex cognitive abilities. These levels consist of knowledge, comprehension, application, analysis, synthesis, and evaluation (Kodir, 2015). The affective domain is related to attitudes and can be predicted changes in people who have high cognitive abilities. Attention to lessons, discipline, motivation to learn, respect for teachers and classmates, study habits, and social relationships are some examples (Kodir, 2015). he psychomotor domain is related to skills and the ability of learners to act. There are six levels of skills, namely: reflex movements, movement skills, conscious movements, perceptual abilities, including distinguishing visual, auditory, motor, and other aspects, abilities in the physical field, such as strength, harmony, and accuracy, skill movements from simple to complex ones, as well as abilities in nonverbal communication, such as expressive and interpretive movements. (Kodir, 2015)

# LITERATURE REVIEW

Some research that can be described as an addition to insight includes research by Arif Rifan Hidayat and Erfian Junianto (2017) entitled The Effect of Gadgets on Student Achievement of Tasikmalaya Islamic Foundation Vocational School, showing that the results of research and hypothesis testing using SPSS version 20 have concluded that H0 is accepted and Ha is rejected, so the hypothesis states that there is a significant influence between the variables perceived

usefulness (X1) and perceived ease of use (X2) simultaneously on Attitude Toward Using (Y). The effect of these two variables on Attitude Toward Using (Y) is 2.3%, and the rest is 97.7%(Arif Rifan Hidayat, 2017).

Rahayu R et al (2018) entitled The Impact of the Use of Gadgets on the Learning Outcomes of IKIP Siliwangi Students, based on this study, gadgets greatly influence the learning process, as indicated by the number of students who use gadgets during the learning process. The effect of gadgets in general is found in the results (48.53%), learning using gadgets (55.12%), learning without using gadgets (35.7%), then the effect of gadgets on learning outcomes (46.34%) and finally the effect of gadgets on learning outcomes (46.95%) (Rahayu R et al., 2018). Likewise, research by Domitila et al, (2021) entitled Analysis of the Use of Gadgets on Social Interaction of Children in State Elementary Schools in Singkawang City, shows that the results of this study are The use of gadgets affects the social interactions of students in State Elementary School 91 Singkawang City. Some of the impacts include students who are less polite in speech and behavior, indifferent to the learning process, become lazy to learn, interact less with friends, play more games than study, and tend to be shy. In the first observation, the percentage of device use on students' social interaction reached 75%, in the second observation it increased to 93.5%, and in the third observation it reached 100% (Domitila et al., 2021).

Santoso and Farhan Aldino's research (2020) entitled The impact of the use of devices on elementary school students' learning, the results of this study show that the role of devices is very important to make it easier for an educator to distribute various kinds of material to students to obtain the information sources and material formats they need. When devices are used as a supporting medium for reading and learning, they make students more interested and make learning activities more varied, effective, and fun (Santoso et al., 2020).

Different results were shown in the research of Nikmawati et al (2021) entitled The Effect of Gadged Use on the Achievement Level of Students of SMPN Satu Atap Pakisjaya Karawang, The use of gadgets has no significant effect on student learning outcomes, as evidenced by the simple regression analysis which shows t-count < t-table (0.539 < 2.06) and significance 0.596 >

0.05. On the other hand, gadgets have a significant effect on students' interest in learning, with t- count > t-table (5.044 > 2.063) and a significance of 0.000 < 0.05. Thus, it can be concluded that gadget use does not have a significant effect on student learning outcomes, but has a significant effect on student interest in learning at the elementary school level (Nikmawati et al., 2021).

Some studies also show the positive effect of gadget use on student achievement including Dian Kurniawati (2022) entitled The Effect of Gadget Use on Student Learning Outcomes, the results showed that gadget use can affect student achievement. This can be seen from the lowest percentage which reached 5.5% and the highest 97.7%. The average value found was 56%. (Dian

Kurniawati, 2022). There is also research (Rahayu et al., 2022) entitled Analysis of the Impact of Gadget Use on Student Learning Outcomes in Islamic Religious Education Subjects for Fifth Grade Students at SD Negeri 61 Lebong, that the results of this study show that there are several positive and negative impacts of using gadgets on children. Positive impacts include: (1) increasing students' knowledge, (2) as a communication tool, and (3) as an entertainment medium. Meanwhile, the negative impacts include: (1) difficulty concentrating, (2) lack of focus when learning, (3) lack of focus in learning, (4) lazy reading and opening books, (5) speaking following the language on the device, (6) emotional disturbance, (7) addiction, (8) neglecting duties and obligations, and (9) lack of manners (Rahayu et al., 2022). There is also Istanti and Meyfiani (2023) entitled The Effect of Addiction to the Use of Gadgets on Mathematics Learning Outcomes, the research shows that addiction to the use of gadgets has an impact on student math learning outcomes by 54.1%, while the remaining 55.9% is influenced by other factors (Istanti & Meyfiani, 2023).

Nurhati & Yanti (2024) entitled The Effect of Device Use on Learning Achievement of Elementary School Students. obtained the results The use of devices affects learning achievement by 15.5%, while the remaining 84.5% is influenced by other variables not examined in this study. Thus, it can be concluded that there is a positive relationship between the use of devices and learning achievement. If students use devices to find learning materials or watch educational videos, this can improve learning achievement. Conversely, if devices are used only to play games or watch negative content, students' learning achievement will decrease(Nurhati & Yanti, 2024).

The similarity to the above studies is that they both examine the impact and influence of gadgets on students, although they are studied from different perspectives on achievement, interest in learning, and the influence of gadgets in their learning.

The difference between this research and previous research lies in different types of research and research locations, researchers use associative research types while in previous studies no one has used this type of research.

# RESEARCH METHOD

This research adopts a quantitative approach. The quantitative approach is a method used to test certain theories by analyzing the relationship between variables (Sinaga, 2022). These variables are measured using research instruments, so that data in the form of numbers can be analyzed following statistical procedures (Jannah, 2016). Quantitative research is based on positivism and is used to study specific populations or samples. It collects data using research instruments and analyzes data quantitatively or statistically to validate predetermined hypotheses (Sugiyono, 2019)

By measuring the index of research variables, a quantitative approach is used to conduct research in the end to provide an overview of these factors, this approach aims to show the relationship between variables, test theories, and find generalizations for predictive value (Mustaqim, 2016). The reason why researchers choose to use this approach is because researchers want to measure how much influence the use of gadgets has on PAI learning outcomes in class IV and V students at SDN 2 Dwijaya, Musi Rawas Regency. The amount of influence will be measured using statistical data analysis, thus showing the relationship between variables in this study.

This type of research is associative research. Associative research is research that aims to measure the relationship between two or more variables. can serve to explain, predict and control a symptom (Garaika, 2019) ssociative research is research that aims to identify the relationship between two or more variables, as well as to find roles, influences, and causal relationships between independent variables and dependent variables (Jannah, 2016). esearchers use associative methods to analyze the causal relationship between independent variables, which are factors that cause changes or the emergence of dependent variables. In this context, the use of gadgets serves as the independent variable, while PAI learning outcomes are the affected dependent variable. This analysis is applied to discuss quantitative data, which is in the form of numbers.

The location of this research was conducted at SDN 2 Dwijaya, Tugumulyo District, Musi Rawas Regency, the subjects in this study were all classes IV and V, totaling 55 students. This study was conducted to measure whether there is an effect of the use of gadgets on PAI learning outcomes in class IV and V students of SDN 2 Dwijaya. At first the researchers made initial observations and surveys, it turned out that several interesting things were found to be researched. Based on observations, researchers found that the learning outcomes of class IV and V students totaling 55 students, there were 40 students who experienced a decrease in Islamic Religious Education grades.

Population is a generalization area that includes objects or subjects with certain qualities and characteristics set by researchers to be studied and concluded. The sample is part of the number and characteristics of the population. Conclusions drawn from the sample can be applied to the population. Therefore, samples taken from the population must be truly representative (Sugiyono, 2019). Thus the population in this study were students in grades IV and V of SDN 2 Dwijaya, totaling 55 students. The sample was carried out on grade IV and V students at SDN 2 Dwijaya, totaling 55 students. The reason for selecting samples in grades IV and V is because grade IV and V students can already make realistic statements.

The sample in this study is a number of student populations in grades IV and V of SDN 2 Dwijaya. This study used non-probability sampling techniques. Non probability sampling is a sampling technique by not providing equal opportunities or opportunities for each element or

member of the population to be selected as a sample (Sugiyono, 2019). The approach used is a total sample. Total sampling is a sampling technique where all members of the population are used as samples (Sugiyono, 2019). In this study, the sample used was the number of students in both grades IV and V of SDN 2 Dwijaya, totaling 55 students. The reason the researchers in this study took samples with the total sample technique stated that where the population size was <100, the entire population was sampled in the study. (Sugiyono, 2019).

## Operasionalisasi Variabel

Variable operationalization is needed to determine the types and indicators of the variables involved in this study. In addition, the operationalization of variables aims to determine the measurement scale of each variable, so that hypothesis testing can be carried out appropriately with tools. In more detail, the operationalization of variables in this study can be seen in the following table:

**Table 3.1**

**Operationalization of Variables**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Variable Concept** | **Dimensions** | **indicator** | **Scale** | **Item** |
| Variable X: Gadget Usage  ( Positive impact) | Gadgets can be a medium for children to get creative and interesting ideas from the information contained in the gadget. | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | Gadgets can be a medium for children to enjoy learning. | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | The sophistication of gadgets means that children are more interested in reading | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | Devices help children in making assignments at school | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | The presence of gadgets makes it easier for children to communicate with friends | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | Children do assignments from teachers using gadgets | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | Children are attracted to gadgets because there are many applications for learning. | Utilization of gadgets | ordinal | 5  4  3  2  1 |
|  | Children are more interested in using gadgets to learn than playing games. | Utilization of gadgets |  | 5  4  3  2  1 |
|  | Childhave a social media account to connect with friends | Utilization of gadgets |  | 5  4  3  2  1 |
|  | ChildI prefer to study online rather than face to face because I can be satisfied playing with my gadgets at home | Utilization of gadgets |  | 5  4  3  2  1 |
| Variable X: Gadget Usage  ( Negative impact) | Children use gadgets for more than 3 hours per day | Intensity of gadget use | ordinal | 1  2  3  4  5 |
| Gadgets make children lazy | Utilization of gadgets | ordinal | 1  2  3  4  5 |
| Children find it very difficult to divide their time between studying and playing with gadgets. | Intensity of gadget use | ordinal | 1  2  3  4  5 |
| Children rarely read books and often play games | Utilization of gadgets | ordinal | 1  2  3  4  5 |
| Children get bored easily reading books and read more often using gadgets. | Utilization of gadgets | ordinal | 1  2  3  4  5 |
|  | Children cannot concentrate on studying when they play with gadgets for too long. | Utilization of gadgets | ordinal | 1  2  3  4  5 |
|  | Children spend more time with devices than studying | Intensity of gadget use | ordinal | 1  2  3  4  5 |
|  | Children play gadgets every day | Intensity of gadget use | ordinal | 1  2  3  4  5 |
|  | Children feel less social if they don't play with devices | Utilization of gadgets | ordinal | 1  2  3  4  5 |
|  | Children prefer playing on gadgets rather than playing with friends and relatives | Utilization of gadgets | ordinal | 1  2  3  4  5 |
| Variable Y: PAI Learning Outcomes | PAI PAT Score Results for Semester 2 of the 2023/2024 Academic Year, Knowledge Aspect | a. Very good  b. Good  c. Enough  d. Less | interval | 90-100  80-90  70-80  0-70 |
|  | PAI PAT Score Results for Semester 2 of the 2023/2024 Academic Year, Skills Aspect | a. Very good  b. Good  c. Enough  d. Less | interval | 90-100  80-90  70-80  0-70 |

**Table 3.2**

**Criteria for Weighting Values ​​on the Likert Scale**

|  |  |  |  |
| --- | --- | --- | --- |
| **No.** | **Answer Options** | **Weight of Value** | |
| **Positive Statement (+)** | **Negative Statement (-)** |
| 1. | Strongly agree | 5 | 1 |
| 2. | Agree | 4 | 2 |
| 3. | Quite Agree | 3 | 3 |
| 4. | Don't agree | 2 | 4 |
| 5. | Strongly Disagree | 1 | 5 |

Source: Sugiyono (2016:82)

## Data Collection Techniques

The process of collecting data in research conducted by researchers requires effective methods or techniques to obtain good, structured, and accurate information. Thus, the validity of the information obtained can be accounted for..

To obtain data from the two variables in this study, namely the use of gadgets and PAI learning outcomes in grade IV and V students at SDN 2 Dwijaya, the data collection technique uses a closed questionnaire, namely statements or statements that already have alternative answers (options) that can only be selected by respondents. In this study, the questionnaire used consisted of 20 statements in indicator X, using an ordinal scale and documentation of PAT values ​​in the knowledge value aspect and the skill value aspect for the 2023/2024 academic year.

### **Instrument Test**

To assess whether the instrument is valid and reliable, a trial of the instrument can be conducted. In collecting data for this study, an instrument was used that was expected to be able to measure data with good validity and reliability. The researcher conducted a trial of the questionnaire to identify questions that might have less objective, less clear, or confusing answers.

**Table 3.3**

**GADGETS USE QUESTIONNAIRE INSTRUMENT OUTLINE**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Variables | Indicator | Description | Question Items | |
| Positive | Negative |
| 1. | The Influence of Gadgets | Utilization of gadgets | Gadgets as a learning resource | 1,2,3,4,6,7,8,10 | 12,14,15, 16 |
| Gadgets as a communication tool | 5.9 | 19.20 |
| Intensity of gadget use | Duration of gadget usage |  | 11.17 |
| Gadget usage time |  | 13.18 |
| Total | | | | 10 | 10 |

### **Validity Test**

A validity test is considered valid if there is a match between the two data collected and the reality that occurs in the subject being studied. A valid measurement tool means that the instrument used to obtain the data is accurate..Validity describes how accurate the data that actually occurs in the subject is compared to the data that was successfully collected by the researcher. (Nuriyati et al., 2022)

This validity test is conducted using the Pearson Correlation formula (Product Moment Correlation). The instrument whose validity is tested uses the Pearson Correlation formula (Product Moment Correlation) which is stated as follows:



r xy = Correlation coefficient

n = Number of samples

∑ XY = Sum of the multiplication of variables x and y

∑ X = Number of values ​​of variable x

∑ Y = Total value of variable Y

∑ X² = Sum of the powers of the values ​​of the variable x

∑ Y² = Sum of the powers of the values ​​of the variable Y

The following are the indicators used to compile the research questionnaire, which can be seen in the following table:

**Table 3.4**

**Device Usage Indicator**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Indicator** | **Sub Indicators** | **No Item** |
| **Variable X**  Use of gadgets | Utilization of gadgets | Gadgets can be a medium for children to get creative and interesting ideas from the information contained in the gadget. | 1 |
|  |  | Gadgets can be a medium for children to enjoy learning. | 2 |
|  |  | The sophistication of gadgets means that children are more interested in reading | 3 |
|  |  | Devices help children in making assignments at school | 4 |
|  |  | The presence of gadgets makes it easier for children to communicate with friends | 5 |
|  |  | Children do assignments from teachers using gadgets | 6 |
|  |  | Children are attracted to gadgets because there are many applications for learning. | 7 |
|  |  | Children are more interested in using gadgets to learn than playing games. | 8 |
|  |  | Childhave a social media account to connect with friends | 9 |
|  |  | ChildI prefer to study online rather than face to face because I can be satisfied playing with my gadgets at home | 10 |
|  | Intensity of Gadget Usage | Children use gadgets for more than 3 hours per day | 11 |
|  | Gadgets make children lazy | 12 |
|  |  | Children find it very difficult to divide their time between studying and playing with gadgets. | 13 |
|  |  | Children rarely read books and often play games | 14 |
|  |  | Children get bored easily reading books and read more often using gadgets. | 15 |
|  |  | Children cannot concentrate on studying when they play with gadgets for too long. | 16 |
|  |  | Children spend more time with devices than studying | 17 |
|  |  | Children play gadgets every day | 18 |
|  |  | Children feel less social if they don't play with devices | 19 |
|  |  | Children prefer playing on gadgets rather than playing with friends and relatives | 20 |

**Table 3.5**

**PAI Learning Outcome Indicators**

|  |  |  |  |
| --- | --- | --- | --- |
| **Variables** | **Indicator** | **Sub Indicators** | **No Item** |
| **Variable Y**  PAI learning outcomes | PAI PAT Score Results Semester 2 Academic Year 2023/2024 | PAI subject scores in the knowledge aspect | 1 |
| PAI subject scores for the Skills aspect | 2 |

The following are the criteria for the correlation coefficient value that can be used as a benchmark in testing the validity of questions:

**Table 3.6**

**Instrument validity criteria**

|  |  |
| --- | --- |
| **Correlation Coefficient** | **Decision** |
| 0.000 - 0.199 | There is almost no correlation |
| 0.200 - 0.399 | Low correlation |
| 0.400 - 0.599 | The correlation is quite high |
| 0.600 - 0.799 | High correlation |
| 0,800 - 1,000 | Very high correlation |

The validity testing criteria in this study used a significance level of 0.05. The testing criteria include: If r count > r table, then the measuring instrument used is valid. And if r count < r table, then the measuring instrument used is invalid.It is known that rtable uses a significance level of α = 0.05 with n = 55, so the rtable value is 0.263.. To facilitate the calculation of excessive data, the researcher used the assistance of SPSS version 27.00 (Statistical Product and Service Solutions).

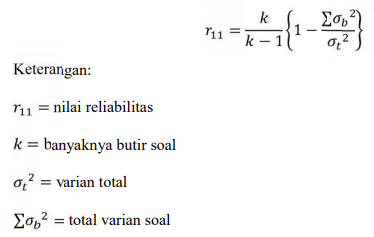
**Table 3.7**

**Validity Test Results**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No.** | **Statement** | **RCount** | **RTable** | **Category** | **Criteria** | **Information** |
| 1 | P1 | 0, 899 | 0.263 | Valid | Very high | Used |
| 2 | P2 | 0.838 | 0.263 | Valid | Very high | Used |
| 3 | P3 | 0, 862 | 0.263 | Valid | Very high | Used |
| 4 | P4 | 0.814 | 0.263 | Valid | Very high | Used |
| 5 | P5 | 0.849 | 0.263 | Valid | Very high | Used |
| 6 | P6 | 0.913 | 0.263 | Valid | Very high | Used |
| 7 | P7 | 0.764 | 0.263 | Valid | Tall | Used |
| 8 | P8 | 0.764 | 0.263 | Valid | Tall | Used |
| 9 | P9 | 0.727 | 0.263 | Valid | Tall | Used |
| 10 | P10 | 0.857 | 0.263 | Valid | Very high | Used |
| 11 | P11 | 0.811 | 0.263 | Valid | Very high | Used |
| 12 | P12 | 0.747 | 0.263 | Valid | Tall | Used |
| 13 | P13 | 0.776 | 0.263 | Valid | Tall | Used |
| 14 | P14 | 0, 814 | 0.263 | Valid | Very high | Used |
| 15 | P15 | 0, 360 | 0.263 | Valid | Low | Used |
| 16 | P16 | 0, 679 | 0.263 | Valid | Tall | Used |
| 17 | P17 | 0, 416 | 0.263 | Valid | High enough | Used |
| 18 | P18 | 0, 296 | 0.263 | Valid | Low | Used |
| 19 | P19 | 0, 376 | 0.263 | Valid | Low | Used |
| 20 | P20 | 0, 722 | 0.263 | Valid | Tall | Used |

### **Reliability Test**

Reliability is the accuracy of a measuring instrument in measuring what it is intended to measure. This means that whenever the measuring instrument is used, it will provide measurement results with the same value (Nana Sudjana, 2007). To test the reliability of a test, use the Cronbach's Alpha formula, namely:



The following are the criteria for interpreting the correlation index that can be used as a reference in testing the reliability of the instrument as shown in the following table:

**Table 3.8**

**Instrument Reliability Criteria**

|  |  |
| --- | --- |
| **Correlation Coefficient (r)** | **Decision** |
| 0.00 - 0.20 | Not reliable |
| 0.20 - 0.40 | Low reliability |
| 0.41 - 0.70 | Quite reliable |
| 0.71 - 0.90 | High reliability |
| 0.91 - 1.00 | Very high reliability |

**Table 3.9**

|  |  |
| --- | --- |
| **Reliability Statistics** | |
| Cronbach's Alpha | N of Items |
| .957 | 20 |

Based on table 3.9, it was found that the reliability of the gadget usage questionnaire had a reliability coefficient of 0.957 meansvery high category, so thatthe data used is reliable or trustworthy. To facilitate the calculation, the researcher uses the help of SPSS 27.00 (Statistical Product and Service Solutions).

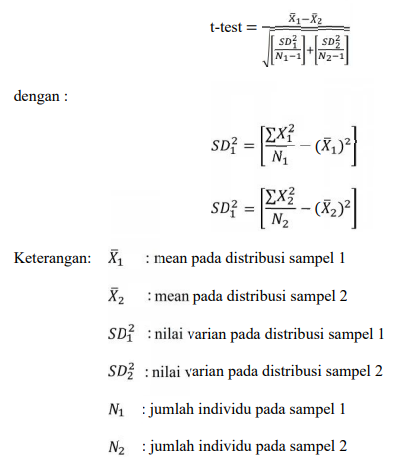
## Data Analysis Techniques

Data analysis is an important part of research. Conducted after sample data is collected with the selected instrument, data analysis will be used to answer research problems or test the proposed hypothesis. Correct and precise data analysis will produce the right conclusion.

The researcher used quantitative data analysis in this study. The statistics used were the t-test, and the requirements met before the t-test was conducted were as follows:

### **Hypothesis Testing**

Testing of the research hypothesis was conducted using the T test with the help of the SPSS 27 for Windows program. The T test was used to measure whether or not there was an influence of gadget use on PAI learning outcomes. The T test used the Statistical Package for the Social Sciences (SPSS) 27 for Windows, using the following formula:



The criteria for testing the hypothesis are:

H0: There is no influence of gadget use on PAI learning outcomes in grades IV and V of SDN 2 Dwijaya.

Ha: There is an influence of gadget use on Islamic Religious Education learning outcomes in grades IV and V of SDN 2 Dwijaya.

Decision criteria:

1. Accept Ho if significance > 0.05
2. Reject Ho if significance < 0.05

# RESULT AND DISCUSSION

## RESULT

### **Research Implementation**

The implementation of this research on July 25, 2024, was carried out directly by the researcher and according to the schedule. This research was conducted in grades IV and V of SDN 2 Dwijaya in the odd semester of the 2024/2025 school year. In the implementation of the research, the researcher distributed a gadget usage questionnaire to all students in grades IV and V of SDN 2 Dwijaya. Before conducting the research, a trial of the questionnaire instrument was carried out in grade V totaling 35 students on July 20, 2024.

### **Respondent Identity**

Respondent identity data is obtained from the statement questionnaire they filled out. Distribution of respondent identity data to provide an overview of the respondent's condition. By using descriptive statistics, the results of the study will provide an overview of the distribution of data in the field.The data presented is raw data obtained using descriptive statistics.

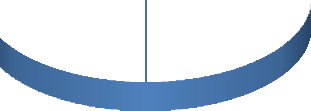
* 1. Respondent Age

Respondents' age is related as a description of individual experience and responsibility. The tabulation of respondents' ages is as follows.

**Table 4.1**

**Respondent Age**

|  |  |  |
| --- | --- | --- |
| **Age** | **Number of Respondents (People)** | **Percentage (%)** |
| 11 years old | 37 | 67.3% |
| 12 years old | 18 | 32.7% |
| Total | 55 | 100% |



**Usia**

32,7%

67,3%

1. Tahun
2. Tahun

Source: Researcher's work in 2024.

Based on table 4.1, it can be seen that respondents aged 11 years were 37 people with a percentage of 67.3% and those aged 12 years were 18 people with a percentage of 32.7%. This shows that students in grades IV and V of SDN 2 Dwijaya are on average 11 years old, which is a productive age for learning.

* 1. Respondent Gender

Gender in general can affect how a person behaves. Often, in a field of work, gender is a differentiator in the activities carried out by individuals. Respondent data are distributed by gender as follows.

**Table 4.2**

**Respondent Gender**

|  |  |  |
| --- | --- | --- |
| **Gender** | **Number of Respondents (People)** | **Percentage (%)** |
| Man | 31 | 56.4% |
| Woman | 24 | 43.6% |
| Total | 55 | 100% |

Source: Researcher's work in 2024.

Based on table 4.2, it can be seen that there were 31 male respondents with a percentage of 56.4% and 24 female respondents with a percentage of 43.6%.

**Description of Research Results**

1. Research Results Using Questionnaires

The questionnaire that was distributed to respondents contained 20 statements, the following is a description of the questionnaire on gadget use among students.

1. Statement 1

Statement 1 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 1 is in the gadget indicator as a learning resource. Statement 1 is a positive statement that states that "Gadgets can be a medium for children to get creative and interesting ideas from the information contained in the gadget". After being tested on respondents, statement 1 obtained a validity of R Calculate of0.899> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the reliability test of the 1st statement is 1.015 and a reliability coefficient of 0 is obtained.957with a very high category. So that statement 1 can be used in research

1. Statement 2

The 2nd statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid the 2nd statement is in the gadget utilization indicator as a learning resource. The 2nd statement is a positive statement that states that "Gadgets can be a medium for children to enjoy learning.". After being tested on respondents, the 2nd statement obtained a validity of R Calculation of0.838> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the 2nd statement reliability test is 1.736 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 2nd statement can be used in research

1. Statement 3

The 3rd statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 3rd statement is in the gadget utilization indicator as a learning resource. The 3rd statement is a positive statement that states that "The sophistication of gadgets means that children are more interested in reading". After being tested on respondents, the 3rd statement obtained a validity of R Calculation of0.862> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the 3rd statement reliability test is 0.962 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 3rd statement can be used in research

1. Statement 4

The 4th statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 4th statement is in the gadget utilization indicator as a learning resource. The 4th statement is a positive statement that states that "Devices help children in making assignments at school". After being tested on respondents, the 4th statement obtained a validity of R Calculation of0.814> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the reliability test of the 4th statement is 1.213 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 4th statement can be used in research

1. Statement 5

The 5th statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 5th statement is in the gadget utilization indicator as a communication tool. The 5th statement is a positive statement that states that "The presence of gadgets makes it easier for children to communicate with friends". After being tested on respondents, the 5th statement obtained a validity of R Calculation of0.849> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the 5th statement reliability test is 1.638 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 5th statement can be used in research

1. Statement 6

The 6th statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 6th statement is in the gadget utilization indicator as a learning resource. The 6th statement is a positive statement that states that "Children do assignments from teachers using gadgets". After being tested on respondents, the 6th statement obtained a validity of R Calculation of0.913> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the reliability test of the 6th statement is 1.325 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 6th statement can be used in research

1. Statement 7

Statement 7 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 7 is in the gadget indicator as a learning resource. Statement 7 is a positive statement that states that "Gadgets can be a medium for children to get creative and interesting ideas from the information contained in the gadget". After being tested on respondents, statement 7 obtained a validity of R Calculate of0.764> 0.263 (RTabel), which is in the valid category with high criteria. The variance value in the reliability test of the 7th statement is 1.224 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 7th statement can be used in research

1. Statement 8

The 8th statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 8th statement is in the gadget indicator as a learning source. The 8th statement is a positive statement that states that "Children are more interested in using gadgets to learn than playing games.". After being tested on respondents, the 8th statement obtained a validity of R Calculation of0.764> 0.263 (RTabel), which is in the valid category with high criteria. The variance value in the reliability test of the 8th statement is 1.277 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 8th statement can be used in research

1. Statement 9

Statement 9 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 1 is in the gadget utilization indicator as a communication tool. Statement 9 is a positive statement that states that "Childhave a social media account to connect with friends". After being tested on respondents, the 9th statement obtained a validity of R Calculation of0.727> 0.263 (RTabel), which is in the valid category with high criteria. The variance value in the 9th statement reliability test is 1.772 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 9th statement can be used in research

1. Statement 10

The 10th statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 1st statement is in the gadget utilization indicator as a learning resource. The 10th statement is a positive statement that states that "ChildI prefer to study online rather than face to face because I can be satisfied playing with my gadgets at home". After being tested on respondents, the 10th statement obtained a validity of R Calculation of0.857> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the 10th statement reliability test is 1.364 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 10th statement can be used in research

1. Statement 11

Statement 11 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 11 is in the indicatorIntensity of gadget use. The 11th statement is a negative statement which states that "Children use gadgets for more than 3 hours per day". After being tested on respondents, the 11th statement obtained a validity of R Calculation of0.811> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the 11th statement reliability test is 1.513 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 11th statement can be used in research

1. Statement 12

The 12th statement is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, the 12th statement is in the gadget utilization indicator as a learning resource. The 12th statement is a negative statement which states that "Gadgets make children lazy". After being tested on respondents, the 12th statement obtained a validity of R Calculation of0.747> 0.263 (RTabel), which is in the valid category with high criteria. The variance value in the reliability test of the 12th statement is 1.514 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 12th statement can be used in research

1. Statement 13

Statement 13 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 13 is in the indicatorIntensity of gadget use. The 13th statement is a negative statement which states that "Children find it very difficult to divide their time between studying and playing with gadgets.". After being tested on respondents, statement 13 obtained a validity of R Calculation of0.776> 0.263 (RTabel), which is in the valid category with high criteria. The variance value in the reliability test of the 13th statement is 1.817 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 13th statement can be used in research

1. Statement 14

Statement 14 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 14 is in the gadget indicator as a learning source. Statement 14 is a negative statement that states that "Children play games more often than read books". After being tested on respondents, statement 14 obtained a validity of R Calculation of0.814> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the reliability test of the 14th statement is 1.213 and a reliability coefficient of 0 is obtained.957with a very high category. So that statement 14 can be used in research

1. Statement 15

Statement 15 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 15 is in the gadget indicator as a learning source. Statement 15 is a negative statement that states that "Children get bored easily reading books and read more often using gadgets.". After being tested on respondents, the 15th statement obtained a validity of R Calculation of0.360> 0.263 (RTabel), which is in the valid category with low criteria. The variance value in the 15th statement reliability test is 0.467 and a reliability coefficient of 0 is obtained.957with a very high category. So that statement 1 can be used in research

1. Statement 16

Statement 16 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 1 is in the gadget indicator as a learning source. Statement 16 is a negative statement that states that "Children cannot concentrate on studying when they play with gadgets for too long.". After being tested on respondents, the 16th statement obtained a validity of R Calculation of0.679> 0.263 (RTabel), which is in the valid category with very high criteria. The variance value in the 16th statement reliability test is 0.475 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 16th statement can be used in research

1. Statement 17

Statement 17 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 1 is in the indicatorintensity of gadget use. The 17th statement is a negative statement which states that "Children spend more time with devices than studying". After being tested on respondents, statement 17 obtained a validity of R Calculation of0.416> 0.263 (RTabel), which is in the valid category with quite high criteria. The variance value in the 17th statement reliability test is 0.490 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 17th statement can be used in research

1. Statement 18

Statement 18 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 1 is in the gadget indicator as a learning source. Statement 18 is a negative statement that states that "Children play gadgets every day". After being tested on respondents, the 18th statement obtained a validity of R Calculation of0.269> 0.263 (RTabel), which is in the valid category with low criteria. The variance value in the 18th statement reliability test is 0.446 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 18th statement can be used in research

1. Statement 19

Statement 19 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 19 is in the gadget utilization indicator as a communication tool. Statement 19 is a negative statement that states that "Children feel less social if they don't play with devices". After being tested on respondents, the 19th statement obtained a validity of R Calculation of0.376> 0.263 (RTabel), which is in the valid category with low criteria. The variance value in the 19th statement reliability test is 0.959 and a reliability coefficient of 0 is obtained.387with a very high category. So that the 19th statement can be used in research

1. Statement 20

Statement 20 is a questionnaire statement item from the gadget usage variable, in the questionnaire instrument grid, statement 20 is in the gadget utilization indicator as a communication tool. Statement 20 is a negative statement that states that "Gadgets can be a medium for children to get creative and interesting ideas from the information contained in the gadget". After being tested on respondents, statement 20 obtained a validity of R Calculate of0.722> 0.263 (RTabel), which is in the valid category with high criteria. The variance value in the 20th statement reliability test is 1.889 and a reliability coefficient of 0 is obtained.957with a very high category. So that the 20th statement can be used in research

b. Learning Outcomes

Students can obtain learning outcomes when they have completed all components of the learning activities..The learning outcomes in this study used the Final Semester Assessment (PAS) scores of even grade students in grades IV and V of SDN 2 Dwijaya. The recapitulation of student learning outcomes in this study can be seen in the appendix.

**Table 4.5 Hypothesis Test Results**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **No.** | **Statement** | **RCount** | **RTable** | **Variants** | **Reliability Coefficient** |
| 1 | P1 | 0, 899 | 0.263 | 1,015 | 0,957 |
| 2 | P2 | 0.838 | 0.263 | 1,736 | 0,957 |
| 3 | P3 | 0, 862 | 0.263 | 0.962 | 0,957 |
| 4 | P4 | 0.814 | 0.263 | 1,213 | 0,957 |
| 5 | P5 | 0.849 | 0.263 | 1,638 | 0,957 |
| 6 | P6 | 0.913 | 0.263 | 1,325 | 0,957 |
| 7 | P7 | 0.764 | 0.263 | 1,224 | 0,957 |
| 8 | P8 | 0.764 | 0.263 | 1,277 | 0,957 |
| 9 | P9 | 0.727 | 0.263 | 1,772 | 0,957 |
| 10 | P10 | 0.857 | 0.263 | 1,364 | 0,957 |
| 11 | P11 | 0.811 | 0.263 | 1,513 | 0,957 |
| 12 | P12 | 0.747 | 0.263 | 1,514 | 0,957 |
| 13 | P13 | 0.776 | 0.263 | 1,817 | 0,957 |
| 14 | P14 | 0, 814 | 0.263 | 1,213 | 0,957 |
| 15 | P15 | 0, 360 | 0.263 | 0.467 | 0,957 |
| 16 | P16 | 0, 679 | 0.263 | 0.475 | 0,957 |
| 17 | P17 | 0, 416 | 0.263 | 0.490 | 0,957 |
| 18 | P18 | 0, 296 | 0.263 | 0.446 | 0,957 |
| 19 | P19 | 0, 376 | 0.263 | 0.387 | 0,957 |
| 20 | P20 | 0, 722 | 0.263 | 1,889 | 0,957 |

### **Research Statistical Analysis**

The testing conducted on the research hypothesis using the t-test with the help of the SPSS 27 for Windows program. The use of the t-test aims to determine whether or not there is an effect of gadget use on PAI learning outcomes in grade IV and V students of SDN 2 Dwijaya.

**Table 4.6**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Paired Samples Test** | | | | | | | | | |
|  | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | |  |
| Lower | Upper |
| Pair 1 | The Influence of Gadgets – Learning Outcomes | 5.12727 | 16.97280 | 2.28861 | 9.71566 | -.53888 | 2.240 | 54 | .029 |

Based on the calculation results, the significance value (t count) is 2.240. Furthermore, the t count value is compared with the t table value at a significance level of 5% and dk (n-2) the t table value is 1.674. Because the t count is greater than the t table, there is a significant influence between the use of gadgets on PAI learning outcomes. The results of the hypothesis test calculations are summarized in the following table

**Table 4.7 Summary of Hypothesis Test Results**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variables** | | **Price r** | | **Price t** | | **Information** |
| X | **Y** | **rxy** | **r table** | **t count** | **t table** |  |
| Use of Gadgets | PAI Learning Outcomes | 0.646 | 0.263 | 2.240 | 1,674 | Influence and significance |

The significance value for gadget use on PAI learning outcomes is 0.029 (sig.2-tailed). The provisions in decision making are based on the following provisions:

Hypothesis:

Ha: There is an influence of gadget use on the learning outcomes of PAI grades IV and V of SDN 2 Dwijaya.

Ho: There is no effect of gadget use on the learning outcomes of Islamic Religious Education students in grades IV and V of SDN 2 Dwijaya.

Decision criteria:

1. Accept Ho if the significance value > 0.05
2. Reject Ho if the significance value < 0.05

Based on table 4.7, it can be seen that the significance value is 0.029 <0.05 so it can be concluded that Ho is rejected. The interpretation of the data is that there is an influence of gadget use on the learning outcomes of PAI in grades IV and V of SDN 2 Dwijaya.

**DISCUSSION**

Before conducting this research, a questionnaire was tested in class V with 35 students on July 20, 2024. The questionnaire trial showed that all 20 statements were valid. In addition, the reliability coefficient of the gadget usage questionnaire was obtained in a very high category with a reliability coefficient of 0.957. So thatThe data used is reliable or trustworthy, and can be used several times to measure the same object. Continued with the implementation of the research conducted on July 25, 2024 by the researcher by distributing a gadget usage questionnaire to respondents in grades IV and V of SDN 2 Dwijaya

In the implementation of this research, the questionnaire was distributed to all respondents totaling 55 people. Based on the results of the research that has been carried out, it shows that in the testt was obtainedt-value 2.240 > t-table 1.674 withmarkSig. (2-tailed)which is 0.029. This shows that 0.029 < 0.05so it can be concluded that Ho is rejected. The results of the study indicate that there is an influence of gadget use on the learning outcomes of grade IV and V students of SDN 2 Dwijaya.

Based on the results of this study, the use of gadgets with indicators of gadget utilization for learning media and communication tools and indicators of the intensity of gadget use can affect PAI learning outcomes. This is in line with Nortcliffe & Middleton's research,which states that the integration of personal devices in educational settings has shown significant potential to improve learning outcomes. Research shows that students are increasingly using their smartphones and tablets in innovative ways to support formal and informal learning, driving more personalized educational experiences. (Middleton, 2013)

A study of the influence of devices on learning outcomes was also carried out bymelly istanti and nelly indra meyfiani, shows that addiction to gadget use can have an effect on student learning outcomes, even though gadgets themselves have sophistication that can support student learning processes. Based on the results of data analysis in this study, it was concluded that gadgets had a 54.1% effect on mathematics learning outcomes.(Istanti & Meyfiani, 2023)

The positive use of gadgets can encourage students to be active in learning and can increase their insight through gadget media. Difficult learning will become easy if students are able to utilize gadgets as a learning resource media. With proper management, the use of gadgets can be a very useful tool in improving student learning outcomes.

**CONCLUSION**

Based on the results of this study, it can be concluded that there is or there is an influence of gadget use on the learning outcomes of PAI grades IV and V SDN 2 Dwijaya. This is known from the results of the questionnaire on gadget use distributed to all respondents totaling 55 people. Then from the results of the analysis using the T test, the T count value was obtained at 2.240> t table 1.674 and the value (sig.2-tailed) 0.029 <0.05 so that it can be concluded that Ha is accepted and Ho is rejected.

Based on the research results, discussion, and conclusions above, the researcher has the following suggestions.

1. For students, it is hoped that the use of gadgets as a learning medium can increase student activity and increase students' insight in the field of science.
2. For teachers, it is expected that they can use and create creative, effective, innovative, and efficient learning tools and can utilize gadgets as effective learning media in accordance with the objectives of making the learning process more enjoyable.
3. For school principals, it is necessary to provide guidance on how to use gadgets for learning effectively, such as the use of educational applications and limiting game playing time.
4. For parents, pay attention to their sons and daughters in using gadgets, especially at home, and parents should be able to try to be good role models and role models for their children.

**BIBLIOGRAPHY**

A. Rayhani, Wahyu Hanapi, AC (2024). Technology Development in Islamic Education Development Design. 615–616.

Apsari, NC, Nurfauziah, LS, & Asiah, DHS (2023). The Impact of Gadget Use on Early Childhood Social Behavior. Share : Social Work Journal, 13(1), 11. https://doi.org/10.24198/share.v13i1.40927

Arif Rifan Hidayat, EJ (2017). The Influence of Gadgets on the Achievement of Students of the Tasikmalaya Islamic Foundation Vocational School. 4(2), 163–173.

Azhar, D., Bahij, MA, Hasan, I., & Budiyono, S. (2024). Development of Islamic Religious Education (PAI) Learning Model in the Web 3.0 Era: Innovation, and Challenges. Tsaqofah, 4(4), 2008–2023. https://doi.org/10.58578/tsaqofah.v4i4.3120

Dian Kurniawati. (2022). The Influence of Gadget Use on Student Learning Outcomes. Educator (Directory of Elementary Education Journal), 3(1), 20–35. https://doi.org/10.58176/edu.v3i1.559

Domitila, MM, Wulandari, F., & Dina Anika Marhayani. (2021). Analysis of Gadget Use on Social Interaction of Elementary School Children in Singkawang City. 6(2), 131–141.

Garaika, D. (2019). Research Methodology.

Harfiyanto, D., Utomo, CB, & Budi, T. (2015). Social interaction patterns of students using gadgets at SMAN 1 Semarang. Journal of Educational Social Studies, 4(1), 1–5. http://journal.unnes.ac.id/sju/index.php/jess

Https://www.liputan6.com/hot/read/5124058/gawai-dengan- Jenis-perangkat-elektronik-pahami-function-dan-jen-jennya. (nd). No Title https://www.liputan6.com/hot/read/5124058/gawai-hadap-jen-angkat-elektronik-pahami-function-dan-jen-jennya.

Istanti, M., & Meyfiani, NI (2023). The Effect of Gadget Addiction on Mathematics Learning Outcomes. Jurnal Edumatic: Jurnal Pendidikan Matematika, 4(2), 39–43. https://doi.org/10.21137/edumatic.v4i2.803

Jannah, BP and L. Miftahul. (2016). Quantitative Research Methodology. In PT Rajagrafindo Persada (Vol. 3, Issue 2). https://www.infodesign.org.br/infodesign/article/view/355%0Ahttp://www.abergo.org.br/revista/index.php/ae/article/view/731%0Ahttp://www.abergo.org.br/revista/index.php/ae/article/view/269%0Ahttp://www.abergo.org.br/revista/index.php/ae/article/view/106

Junpahira, SV, & Pahlevi, T. (2023). The Effect of Using Interactive Multimedia Articulate Storyline 3 Based on Problem Based Learning on the Learning Outcomes of Class XI MP Students at SMK Nurul Islam Gresik. Journal of Educational and Learning Dimensions, 11(2), 149–171. https://doi.org/10.24269/dpp.v11i2.7220

Ministry of Religion of the Republic of Indonesia. (2015). Basic Concepts of Measurement, Assessment, Evaluation and Their Application in Learning. Textbook of Constitutional Theory and Science, 13.

Kodir, A. (2015). Evaluation and Assessment of Learning. https://doi.org/10.5346/trbane.1954.193

Middleton, N. &. (2013). THE INNOVATIVE USE OF PERSONAL SMART DEVICES BY STUDENTS TO. 6.

Muhammad Iqbal Ulil Amri, Reza Syehma Batiar, DEP (2021). TRAPSILA: Journal of Elementary Education 'The Impact of Gadget Use on School Children's Interaction Skills. 1–10.

Mustaqim. (2016). Mixed Methods Research Methods Quantitative Qualitative / Mixed Methods An Alternative Approach. Jurnal Intelegensia, 04(1), 1–9. https://ejournal.unisnu.ac.id/JI/article/view/1351

Ni Putu Wahyu Sanjiwani1, et al., N. d. (2020). The Use Of Gadgets And Decreased Concentration Of Learning In School – Age Children. 1–14.

Nikmawati, N., Bintoro, HS, & Santoso, S. (2021). The Impact of Gadget Use on Elementary School Students' Learning Outcomes and Learning Interests. Jurnal Edutech Undiksha, 9(2), 254. https://doi.org/10.23887/jeu.v9i2.38975

Nurhati, & Yanti, PG (2024). The Influence of Gadget Use on Elementary School Students' Learning Achievement. Basicedu Journal, 8(1), 466–467. https://journal.uii.ac.id/ajie/article/view/971

Nuriyati, T., Falaq, Y., Nugroho, ED, Hafid, HH, & ... (2022). Educational Research Methods (Theory & Application). In Widina Bhakti Persada: Bandung. https://repository.penerbitwidina.com/publications/354716/metode-penelitian-pendidikan-teori-aplikasi%0Ahttps://repository.penerbitwidina.com/media/publications/354716-metode-penelitian-pendidikan-teori-aplik-d68bda90.pdf

Nurmalasari, & Wulandari, D. (2018). The Influence of Gadget Use on the Achievement Level of Students of SMPN Satu Atap Pakisjaya Karawang. Computer Science and Technology, 3(2), 1–8.

Oktafia, DP, Triana, NY, & Suryani, RL (2021). Duration of Gadget Use on Social Interaction in Preschool Children. Health Journal, 4(1), 31–47.

Puslitjak, Ministry of Education and Culture, 2020. (2020). Determinant Factors of Student Learning Outcomes.

Rahayu, A., Hidayani, M., & Sukarno. (2022). Analysis of the Impact of Gadget Use on Student Learning Outcomes in Islamic Religious Education Subjects for Grade V Students at SD Negeri 61 Lebong. Insan Cendekia: Journal of Islamic, Social and Educational Studies, 1(1), 32–40.

Rahayu R, AA, Amalia, A., Handayani, SN, & Rostikawati, Y. (2018). The Impact of Gadget Use on the Learning Outcomes of IKIP Siliwangi Students. Parole (Journal of Indonesian Language and Literature Education), 1(2), 157–164. http://dx.doi.org/10.22460/p.v1i2p%25p.192

Ripai, I., & Ropiah, O. (2023). Prezi-Based Digital Learning Media in E-Commerce Courses on Learning Outcomes of Information and Communication Technology Education Students at STKIP Muhammadiyah Kuningan. Journal of Educational and Learning Dimensions, 11(2), 130–141. https://doi.org/10.24269/dpp.v11i2.6205

Rosiyanti, H., & Muthmainnah, RN (2018). The Use of Gadgets as Learning Resources Affects Learning Outcomes in Basic Mathematics Courses. FIBONACCI: Journal of Mathematics and Mathematics Education, 4(1), 25. https://doi.org/10.24853/fbc.4.1.25-36

Santoso, FA, Kristen, U., & Wacana, S. (2020). The impact of gadget use on elementary school students' learning. 2(1), 49–54.

Sinaga, D. (2022). Textbook of Research Methodology (Quantitative Research). In UKI Press. www.penapersada.com

Siregar, AR, Harahap, A., & Nasution, MS (2024). Digital Media Communication Ethics in the Post-Truth Era. 5(1), 39–53.

Sugiyono, D. (2019). Qualitative quantitative research methods and R&D. In Alfabeta Publisher.

Widiawati. (2014). Understanding Gadgets. 4(1), 1–23.

Yuliani, S., & Hartanto, D. (2022). Digital Online Learning by Using Digital Storytelling for Pre-Service Teacher Students. International Journal of Language Education, 6(3), 221–232. https://doi.org/10.26858/ijole.v6i3.20408