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The Effectiveness of Digital-Based Islamic Religious Education Learning Media on the Formation of Noble Morals for Children Aged 5-6 Years at the State Kindergarten of Samporoa

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A B S T R A C T

The integration of digital-based media has become an effective approach to enhance the interactivity and attractiveness of learning, including in Islamic education. This study investigates the effectiveness of digital media in fostering noble character among early childhood learners. A quantitative method with a descriptive experimental approach was employed, using observations, interviews, documentation, and assessment instruments for data collection. The data were analyzed through descriptive and inferential techniques.The findings demonstrate that the application of digital learning media significantly improved children's character development at Pembina Samporoa State Kindergarten. Before the intervention, none of the children were categorized as Developing Very Well, but this increased to 30.55% afterward. The Developing as Expected category also rose from 36.11% to 41.66%. In contrast, the Starting to Develop and Not Developing categories decreased from 49.99% to 22.21% and from 13.88% to 5.55%, respectively. A paired sample test confirmed the significance of these results, with a value of 9.644 > 1.795885 and a significance level of 0.01 < 0.05, indicating that Ho was rejected and HI accepted. Overall, the study confirms that infocus-based digital media effectively supports the formation of noble character in early childhood, highlighting its potential to strengthen Islamic character education.

1. Introduction

The importance of education in building the nationalism of a country lies in the development of individual potential, where children are directed to optimize their abilities. Early childhood education (ECE) is a learning process aimed at children aged 0 to 6 years, with the goal of maximizing their potential. According to Law Number 20 of 2003, Article 14, ECE is defined as an effort of nurturing conducted from birth to the age of 6 years, through educational stimulation aimed at shaping, nurturing, and developing the physical and mental aspects of children, so that they

are ready to continue their education to the next level. Early childhood education should focus on the development of six areas of growth, namely: 1. Motor skills, 2. Cognitive skills, 3. Social-emotional skills, 4. Moral and religious values, 5. Linguistic skills, and 6. Artistic skills (Nurhayati et al., 2021). The early years are a crucial phase in human life, as during this period, children become sensitive to various stimuli from their surrounding environment (Hesti W, 2020 in Lidano, 2022).

Therefore, early childhood is the right time to instill the foundations of religious and moral education. The importance of Islamic education from an early age is highly significant, as this education aims to develop children's potential into individuals who are faithful, pious, and possess noble character. Islamic Education plays a vital role in shaping the character and moral integrity of children, especially during early childhood. The process of instilling noble character in children is part of education and character development aimed at shaping good behavior and attitudes, in accordance with moral and religious values, so that children can grow into responsible individuals who are beneficial to society (Mulyani, 2020). According to Ibn Miskawaih (Daulay, 2021), the formation of noble character in children should begin at an early age by understanding child psychology and integrating religious and moral values. This process includes teaching, habituation, discipline, reward, and advice to build a strong and good character in children.

Islamic Education (PAI) plays a very important role in shaping the character and moral integrity of children, especially during early childhood. According to Mulyasa, (2020), PAI is a systematic effort to educate individuals to understand, internalize, and practice Islamic teachings in their daily lives. This process includes teaching moral values, ethics, and social responsibility. Suhardi (2021) adds that PAI not only functions as a transfer of knowledge but also as an effort to shape the morals and character of students. Majid (2024) also emphasizes that PAI is a planned and conscious effort to prepare students to recognize, understand, internalize, be pious, and possess noble character. With a foundation of religious and moral education in early childhood, children can learn to distinguish between good and bad behavior, as well as right and wrong, and become accustomed to internalizing religious teachings in accordance with their development.

The formation of noble character in children is a process of education and character development aimed at shaping good behavior and attitudes in accordance with moral and religious values. Munshorif (2022), citing Al-Ghazali, states that noble character is a trait embedded in the soul, allowing actions to arise easily without the need for prior consideration. The goal is for children to become individuals with noble character, responsibility, and who are beneficial to society (Mulyani, 2020). Therefore, educators need to develop appropriate teaching methods to achieve educational goals in early childhood, especially in religious and moral education, which are essential components in shaping children's character.

Digital learning media can play a role in enhancing children's motivation and interest in learning (Sari, 2020). With enjoyable approaches, such as educational games and animations, children can learn about good and bad behavior in a more

effective way. This approach encourages children not only to understand the theory but also to see real-life examples of moral application in everyday life. Research by Rahman (2022) shows that children engaged in interactive learning are more likely to apply moral values in their daily behavior. Based on the initial observations conducted by the researcher in group B1 of the Pembina Samporoa Kindergarten, several issues related to children's noble character were found, such as the use of inappropriate or disrespectful language, disobedience to teacher instructions, and a lack of tolerance when the teacher is speaking. From these issues, several factors can assist teachers in the formation of children's noble character, such as innovative learning models, diverse learning activities, as well as adequate educational play tools and conducive facilities. Therefore, this research is aimed to implement and test the digital-based Islamic education learning media, which is expected to aid in the effort to shape children's noble character.

2. Methodology

This research method employs a quantitative approach with a one-group pretest-posttest pre-experimental design to determine the cause-and-effect relationship of treatments. This design is used to determine the effectiveness of digital-based Islamic education learning media in shaping children's noble character by comparing the results before and after the treatment within the same group, without a control group (Berger et al., 2018).

Subject

The subjects of this study consisted of children from group B1 at TK Negeri Pembina Samporoa in Palu City, with a total of 12 participants, comprising 6 girls and 6 boys. Data collection techniques were carried out through observation, interviews, documentation, and research instruments. Data analysis was conducted using descriptive analysis, which, according to Sugiyono (2020), is a process of organizing and arranging data obtained from interviews, field notes, and other sources so that the data can be understood and communicated to others. In addition, statistical tests were used to determine whether there were significant differences between the pretest and posttest results.

Data Collection Technique

According to Taherdoost (2021), one of the crucial stages in research is data collection, which can influence the quality of the results by reducing the likelihood of errors during the research process. In this study, the data collection techniques began with observation to evaluate the development of children’s noble character before the treatment using digital media (infocus) in the religious education learning process. After the observation stage, data collection continued through observation and interviews with teachers, conducted before the treatment (pretest) and after the implementation of digital media (infocus) (posttest). This test aimed to assess the development of children’s noble character based on a rubric that covered aspects of politeness, obedience, and tolerance. In addition, the data collection process was

also supported by documentation and the use of assessment instruments, which served as tools to measure the variables under study.

Data Analysis Techniques

According to Susanto et al. (2024), data analysis in research is an essential procedure for transforming the collected data into relevant information. The data analysis in this study involves several important steps:

1. Preparation – In this step, the researcher checks the names or identities of the test participants and prepares digital media (such as an infocus projector) before starting the treatment.
2. Tabulation – At this stage, the researcher analyzes the results of observations and interviews with teachers by assigning scores based on the assessment rubric criteria in the pre-test and post-test, and categorizing the children's scores into interval categories.
3. Application of data in the research approach – In this phase, the researcher processes the data using statistical analysis, including normality testing and hypothesis testing.

Descriptive Analysis

The analysis technique used in this study is descriptive analysis, which is applied to measure the development of children's noble character through an assessment rubric. According to Sugiyono (2020), data analysis is the process of searching for and organizing data obtained from interviews, field notes, and other sources so that it can be understood and communicated to others. If a child's development exceeds the teacher's expectations, they will be categorized as *Very Well Developed* (4 stars). If the child has achieved development according to expectations, they will be categorized as *Well Developed* (3 stars). Children who are still in the process of developing will be categorized as *Beginning to Develop* (2 stars). Meanwhile, children who are not yet able to meet the teacher's expectations will be categorized as *Not Yet Developed* (1 star). Based on Table 1, the frequency and percentage distribution tables, along with explanations, are presented as follows:

Table 1. Frequency and Percentage Distribution

☆☆☆☆	Very well Developed (BSB)
☆☆☆	Well Developed (BSH)
☆☆	Beginning to Develop (MB)
☆	Not Yet Developed

After the field data is successfully collected, the next step is to manage the data that has been successfully collected and then conduct data analysis. To find out the percentage or average of the aspects that have been observed, the data is processed qualitatively using calculations based on percentages (%) according to the formula proposed by Anas (2012), as follows:

$$P = \times 100\% \frac{f}{N}$$

Information:
P = Percentage number
F = Frequency of observation results
N = Total Frequency
100 = Fixed/rounded numbers

Inferential Analysis

The hypothesis testing in this study was carried out using inferential statistical analysis (t-test) with the assistance of SPSS 26.0 to determine the mean scores of children's religious values before and after the treatment**.**
To test whether the research hypothesis, namely *"The effectiveness of digital-based Islamic religious learning media on the development of noble character in early childhood"*, is accepted or rejected, the calculated *t* value is compared with the *t* table at a 95% significance level ($\alpha = 0.05$). If the calculated *t* value exceeds the table value, then H_0 is rejected and H_1 is accepted. Furthermore, if the significance level obtained (sig.) is less than α (0.05), then H_1 is accepted and H_0 is rejected.

3. Results and Discussion

This research was carried out at Samporoa State Kindergarten and involved children in Group B1 which amounted to 12 people, consisting of 6 boys and 6 girls. This research took place from March 6, 2025 to March 21, 2025. The purpose of this study is to determine the effectiveness of digital-based Islamic religious education learning media in the formation of children's noble morals in Samporoa Kindergarten. This study was conducted for 3 weeks with two treatments. In the first week, the researcher made observations. In the second week, precisely on Thursday, the researchers prepared tools (laptops, speakers, tables, and chairs) that were placed in front of the class in the middle of the children, as well as tidying up objects that could interfere with the activity of watching the prophet's example. The researcher then invited the children to sit down and announce the title of the watch to be watched, as well as explain the viewing rules that must be agreed upon and obeyed together. After that, the researcher provides an evaluation before the children go home, in the form of motivation and rewards, such as praise, when the child can answer questions from the teacher or do good to others.

In the third week, or the last week, the researchers gave the final treatment on Wednesday by showing the prophet's exemplary spectacle. On the same day, researchers also conducted a posttest on the children to see if there were any changes before and after treatment. On Friday, the researcher conducted an interview with a B1 grade teacher. After collecting the data, the researcher conducted a data analysis. The results of the analysis show that the use of infocus as a learning medium for Islamic religious education has a significant influence on the formation of noble morals in early childhood. This can be seen from the changes and improvements in each category for each aspect observed during the research, both in the aspects of manners, obedience, and children's tolerance attitudes. The purpose of this study is to determine the effectiveness of gital-based religious

education learning media on the formation of children's noble morals. There are 3 aspects that are of main concern, namely, 1) Aspects of manners, 2) Aspects of being obedient, 3) Aspects of tolerance. The researcher will present the results of observations from the first week to the second week, as well as a recapitulation of data regarding the use of digital media in the formation of noble morals of children aged 5-6 years in group B of Kindergarten Negri Pembina Samporoa Jl.Untad 1 Vatutela.

Table 2. Recapitulation of Observations of Religious Education Learning Before Using Infocus Learning Media

Category	Aspects observed						
	Courtesy Aspects		Obedient or obedient aspects		Aspects of Tolerance		Installment-Installment
	F	%	F	%	F	%	(%)
Very well developed (BSB)	0	0%	0	0%	0	0%	
Grow as expected (BSH)	3	25%	7	58,33%	3	25%	36,11%
Starting to grow (MB)	7	58,33%	4	33,33%	7	58,33%	49,99%
Not yet developed (BB)	2	16,66%	1	8,33%	2	16,66%	13,88%
Sum	**12**	**100%**	**12**	**100%**	**12**	**100%**	**100%**

It can be seen in Table2 that the 12 children in group B of the Samporoa State Kindergarten who were the subjects of the research in observations carried out to see the development of noble morals in early childhood before using infocus-based learning media in Islamic religious education. In the three aspects that have been observed, there are no children in the Very Good Developed (BSB) category, 36.11% of children in the Developing As Expected (BSH) category, 49.99% of children in the Starting Development (MB) category, and 13.88% of children in the Not Developing (BB) category.

Table 3. Recapitulation of Digital-Based Islamic Religious Education Learning Observations After Using Infocus Media

Category	Aspects observed						
	Courtesy Aspects		Obedience Aspect		Aspects of Tolerance		Installment-Installment
	F	%	F	%	F	%	(%)
Very well developed (BSB)	4	33,33%	4	33,33%	3	25%	30,55%
Grow as expected (BSH)	3	25%	6	50%	6	50%%	41,66%
Starting to grow (MB)	4	33,33%	2	16,66%	2	16,66%	22,21%
Not yet developed (BB)	1	8,33%	0	0%	1	8,33%	5,55%
Sum	**12**	**100%**	**12**	**100%**	**12**	**100%**	**100%**

Based on Table 3, it shows that of the 12 children in group B of the Samporoa State Kindergarten who were the subjects of the research in the observation carried out to see the Effectiveness of Digital-Based Islamic Education Learning Media on the Formation of Children's Noble Morals after using infocus learning media. There are 30.55% of children in the Very Good Development (BSB) category, 41.66% of children in the Developing As Expected (BSH) category, 22.21% of children in the Starting Development (MB) category, and 5.55% of children in the Not Yet Developing (BB) category. Of the three aspects, obedience occupies the most dominant position in terms of the number of children who show development, which is 100% or all children are in the developing category. This includes children who begin to demonstrate obedience to class rules, follow the teacher's instructions, and actively participate in learning activities. These results reflect that infocus-based digital media is very effective in visualizing examples of obedient behavior, so that children can imitate them more easily. The absence of children in the "undeveloped" category makes this aspect the strongest indicator of the success of digital-based learning. Meanwhile, the aspects of manners and tolerance have also experienced positive development, but with few children still not showing optimal development.

Descriptive Statistical Analysis

Descriptive data is a description of the two data obtained to support the discussion of research results. Through some of the data descriptions below, it will be seen that the conditions at the beginning and end of the learning of Islamic religious education in an effort to form the noble character of children seen from before and after being given the treatment of digital-based Islamic religious education learning media (*infocus)*

Tabel 3. Descriptive Statistic

	Descriptive Statistic				
	N	**Minimum**	**Maximum**	**Mean**	**Std.Deviation**
Before Treatment	12	4	7	5.42	1.311
After Treatment	12	5	8	7.33	.888
Valid N (listwise)	12				

Based on table 3, the study shows that the use of infocus media in Islamic religious education is effective in the formation of children's morals, with an increase in the average score from 5.42 to 7.33. The highest score increased from 7 to 8, and the lowest score increased from 4 to 5. In addition, the standard deviation decreased from 1.311 to 0.888, indicating an increase in the consistency of the results.

Inferential Analysis (requirements)

Before the data is processed into the t-test, it must first be tested for normality. The normality test is carried out to find out whether or not a data distribution is normal, which later this becomes important to know because it is related to the right statistical test to be used. The following is a table of normality tests.

Table 4. Test of Normality

Tests of Normality

	Shapiro-Wilk		
	Statistic	**Df**	**Itself.**
Before Treatment	.932	12	.407
After Treatment	.957	12	.745

According to Table 4 above, it can be known that the df (degree of freedom) value for before and after treatment is 12. Therefore, it means that the data sample is less than 50. The use *of Shapiro-Wilk* detected normality in this study. Then from this table, it is also known that the significance value for activities before treatment is 0.407 and the Sig value for activities after treatment is 0.745, because the Sig value for both treatments is > 0.05, so it is mostly assumed that the data from the research results before and after treatment are distributed normally.

Table 5. Paired Samples Statistics

	Mean	**N**	**Std.Deviation**	**Std.Eror Mean**
Pair 1 Before Being Treated	6.67	12	1.435	.414
After Treatment	8.92	12	2.109	.609

According to table 5, it shows that the average score of children before and after being given treatment. Before treatment, the average score was achieved at 6.67, while after treatment, the average score achieved was 8.92.

Table 6. Paired Samples Correlation

	N	**Correlation**	**Itself**
Pair 1 before and after the act	12	.861	.000

As per table 6, it shows that the correlation between the two variables is 0.861 with a significance level (sig) of 0.001. Because the sig value is 0.000 < 0.5, this shows that the association between the two average scores before and after treatment is strong and significant.

Table 7. Paired Samples Test

	Paired Differences					t	df	Sig (2 - tailed)
	Mean	Std Deviation	Std Eror Mean	95% Confindence Interval of the Difference				
				Lower	Upper			
Pair 1 Before-After Treatment	-2.250	1.138	.329	-2.973	-1.527	-6.848	11	.000

According to table 7, it can be seen that the t-value of the calculation is 6.848, in the t-test the plus minus sign is not observed so that the value of 6.848> t table 1.138. then it can be concluded that H_0 is rejected and H_1 is accepted which means that there is an influence of the demonstration method in early childhood learning of Group B of the Samporoa Pembina State Kindergarten. Based on the comparison, it is known that the significance value of 0.000 < 0.05 is in accordance with the basis of decision ability in the *paired sample t test,* so it can be concluded that digital-based Islamic religious education learning media has an effect on the formation of noble akahlak in early childhood Group B of Samporoa Pembina State Kindergarten.

4. Conclusion

Based on the results of the study, it can be concluded that the application of infocus learning media in teaching and learning activities at the Pembina Samporoa State Kindergarten contributes significantly to the formation of noble morals in children, especially in Group B. The utilization of this digital media not only makes the learning process more engaging and interactive but also enhances children's understanding of the material presented and encourages them to emulate the moral values displayed. This is evidenced by an increase in the category of children's moral development. Thus, the use of digital-based learning media, particularly infocus, can be viewed as an effective alternative strategy in supporting character education from an early age. This finding also reinforces the importance of integrating digital technology into Islamic education, as it can provide a more contextual, enjoyable, and meaningful learning experience in shaping the noble character of children.

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