

THE EFFECTIVENESS OF SMART BOOK MEDIA ON THE INTRODUCTION OF SEX EDUCATION IN GROUP B1 CHILDREN AT IK NURUL QUR'AN KINDERGARTEN GREAT ACEH

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ABSTRACT

Introducing sex education to early childhood involves providing an understanding of their body, recognizing the opposite gender, and learning how to protect themselves from sexual abuse, thereby mitigating the occurrence of sexual violence and criminal acts. This research aimed to determine the effectiveness of the Smart Book media in introducing sex education to Group B1 children at TK IK Nurul Qur'an, Aceh Besar. The study employed a quantitative method with a one-group pre-test and post-test experimental design. A sample of 16 children was observed, and data were analyzed statistically. The results revealed that the Smart Book media effectively enhanced children's understanding of sex education, as evidenced by an increase in the average pre-test score (9) to the post-test score (13.5). Statistical hypothesis testing indicated significant effectiveness, with a calculated t-value of -18.933 and a significance value ≤ 0.01 ($df = 15$, t-table = 1.753). Thus, the hypothesis was accepted, indicating significant effectiveness of Smart Book media in improving sex education comprehension among 5-6-year-old children.

Keywords: Smart Book, Sex Education, Early Childhood

INTRODUCTION

The early childhood period (0–6 years) is a golden age, during which stimulation of all developmental aspects plays a crucial role in subsequent developmental tasks. During this stage, brain growth experiences rapid (explosive) development, as does physical growth (Oktariana, 2021).

Therefore, sufficient stimulation is essential. Early childhood sex education encompasses developmental aspects based on Bloom's taxonomy, namely cognitive, affective, and psychomotor domains. Children's cognitive abilities related to sexuality include recognizing the names of body parts, understanding the differences between male and female clothing, comprehending the purpose of clothing, and knowing how to care for and protect their bodies properly. Early childhood sex education involves providing accurate information to children to prepare them to adapt appropriately to sexual attitudes in their future lives. This knowledge helps children develop logical and accurate tendencies toward issues of sexuality and reproduction.

Reports in the mass media continuously highlight the rising cases of child sexual abuse. According to the United Nations International Children's Emergency Fund (UNICEF) (2014), approximately 120 million children worldwide—or more than 100 children—have become victims of sexual abuse under the age of 20 (Septiani, 2021). In Indonesia, data from the Ministry of Social Affairs in 2020 showed an increase in child violence and sexual abuse cases during the pandemic, from 8,259 cases between June and August 2020 to 11,797 cases in July and 12,855 cases in August (Amrullah, 2020; Fidiawati, 2022). Child sexual abuse cases have also been reported in Aceh.

Based on preliminary observations conducted in November 2023 on Group B1 of TK IK Nurul Qur'an in Aceh Besar, researchers identified a problem: children's low knowledge and underdeveloped understanding of sex education. This issue stems from a lack of teacher awareness about the importance of early sex education and the use of inappropriate media for delivering this knowledge. During classroom learning on the topic of body parts, children were unable to distinguish between acceptable and unacceptable touches and lacked knowledge about the types and functions of body parts. When teachers used children's magazines to explain body parts, the children appeared bored, indicating limited comprehension of sex education concepts. This limitation is attributed to the lack of variety in teaching media used.

METHODS

The method used in this research is quantitative with the type of experiment used is pre-experiment with a design namely one-group pretest-posttest. The population in this study was all 100 children from the IK Nurul Qur'an Aceh Besar Kindergarten. Meanwhile, the sample is part of the total number of characteristics possessed by the population. The sample in this study was group B1 children, totaling 16 children consisting of 7 boys and 9 girls.

The data collection technique in this research is observation. This technique was used to obtain data about the understanding of sex education in group B1 at the IK Nurul Qur'an Kindergarten, Aceh Besar. The analysis technique in this research uses regression analysis, namely regarding the dependence of one dependent (bound) variable on one or more independent (free) variables, for the purpose of predicting the average value of the dependent variable based on the known value of the independent variable..

RESULTS AND DISCUSSION

The first step undertaken was an initial test, referred to as the pre-test, which included assessment across four indicators. The pre-test was conducted before the lesson began. Following the pre-test, a treatment was administered in the form of guidance and mentoring. Finally, a post-test was conducted at the end of the learning process to evaluate the effectiveness of the Smart Book media in introducing sex education to Group B1 students at TK IK Nurul Qur'an, Aceh Besar. The results of the pre-test and post-test scores for students in this group are presented as follows:

a. Data Normality Test

Before hypothesis testing, it was necessary to perform a normality test. The purpose was to determine whether the pre-test and post-test data were normally distributed. The normality test in this study utilized the Shapiro-Wilk statistical test with the assistance of IBM SPSS 26 for Windows. The test hypotheses used were as follows:

- H_0 : Data are normally distributed.
- H_a : Data are not normally distributed.

A significance level of 0.05 was applied. If the significance value > 0.05 , the data are considered normally distributed. Conversely, if the significance value < 0.05 , the data are considered not normally distributed. The children first underwent the pre-test to assess their baseline knowledge. Subsequently, they received the intervention, after which the post-test was conducted to determine the final scores achieved by the children. The pre-test data are displayed in the following table:

Table 1. Pretest Result Data

No.	Child's Initials	Number of Indicators and Scores				Total Score	The final result	Information
		1	2	3	4			
1.	AM	2	2	2	2	8	50%	Not Completed
2.	DTP	2	2	2	2	8	50%	Not Completed
3.	HA	2	3	2	2	9	56,25%	Not Completed
4.	KA	3	3	2	2	10	62,5%	Not Completed

No.	Child's Initials	Number of Indicators and Scores				Total Score	The final result	Information
		1	2	3	4			
5.	MAAF	2	2	2	2	8	50%	Not Completed
6.	HAA	3	2	2	2	9	56,25%	Not Completed
7.	MAAS	3	1	3	2	9	56,25%	Not Completed
8.	VAK	2	3	3	2	10	62,5%	Not Completed
9.	SAZ	3	3	2	2	10	62,5%	Not Completed
10.	MRAF	2	2	2	3	9	56,25%	Not Completed
11.	TQI	3	2	2	2	9	56,25%	Not Completed
12.	NRF	2	2	3	3	10	62,5%	Not Completed
13.	MAA	2	2	2	2	8	50%	Not Completed
14.	SAR	3	3	2	3	11	68,75%	Not Completed
15.	SMA	2	2	2	2	8	50%	Not Completed
16.	MAH	2	2	2	2	8	50%	Not Completed

Table 2. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Hasil Pretest	.225	16	.030	.853	16	.015

Based on the results of the pretest data normality test, the results obtained were $0.15 \geq 0.05$, so based on the decision making criteria the pretest data was concluded to be normally distributed. Media Smart Book Posttest Results After carrying out the pretest, the next step is to carry out the posttest, namely after taking action and then looking at the results that have been carried out, data from the posttest results can be seen in the following table:

Table 3. Pretest Result Data

No.	Child's Initials	Number of Indicators and Scores				Total Score	Average	Information
		1	2	3	4			
1.	AM	4	4	3	4	15	93,75%	Finished
2.	DTP	3	3	3	3	12	75%	Finished
3.	HA	3	4	3	3	13	81,25%	Finished
4.	KA	4	4	4	3	15	93,75%	Finished
5.	MAAF	3	3	3	3	12	75%	Finished
6.	HAA	4	4	3	3	14	87,5%	Finished
7.	MAAS	3	4	3	3	13	81,25%	Finished
8.	VAK	4	3	3	3	13	81,25%	Finished
9.	SAZ	4	4	3	3	14	87,5%	Finished
10.	MRAF	3	4	3	4	14	87,25%	Finished
11.	TQI	4	3	4	4	15	93,75%	Finished
12.	NRF	4	3	4	3	14	87,5%	Finished

No.	Child's Initials	Number of Indicators and Scores				Total Score	Average	Information
		1	2	3	4			
13.	MAA	3	3	3	4	13	81,25%	Finished
14.	SAR	4	4	4	3	15	93,75%	Finished
15.	SMA	3	4	3	3	13	81,25%	Finished
16	MAH	3	3	3	3	12	75%	Finished

Dari Tabel di atas, dapat diketahui bahwa dari 16 siswa kelas eksperimen yang mengikuti tes akhir, diperoleh 16 siswa tuntas hasil belajarnya karena siswa mencapai nilai ketuntasan minimal (KKM) yaitu ≥ 70

Table 3. Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	Df	Sig.
Hasil Posttst	.197	16	.099	.879	16	.038

Based on the results of the posttest data normality test, the results obtained were $0.38 \geq 0.05$, so based on the decision making criteria the pretest data was concluded to be normally distributed. Smart Book Media Research Results Data Pretest and Posttest After getting the pretest and posttest data, the next step is to combine the two data to see whether the data has a comparison in the normality test. The calculated data from the pretest and posttest can be seen in the following table:

Table 4. Pretest and posttest initial data

No.	Child's initials	Total and item scores	
		Pretest	Posttest
1.	AM	8	15
2.	DTP	8	12
3.	HA	9	13
4.	KA	10	15
5.	MAAF	8	12
6.	HAA	9	14
7.	MAAS	9	13
8.	VAK	10	13
9.	SAZ	10	14
10.	MRAF	9	14
11.	TQI	9	15
12.	NRF	10	14
13.	MAA	8	13
14.	SAR	11	15
15.	SMA	8	13
16	MAH	8	12
	Amount	144	217
	Average	9	13,5

Table 5. Pretest and Posttest Data Normality Test results Normality Test
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
pretest	.225	16	.030	.853	16	.015
posttest	.197	16	.099	.879	16	.038

Based on the results of the normality test data using IBM SPSS 26 for Windows with the Shapiro Wilk test, there is a significant value between the pretest and posttest values, the pretest value is 0.15 and the posttest value is 0.38 where both values are greater than 0.05. Based on decision making criteria, H_0 is accepted, and it can be concluded that the pretest and posttest data are normally distributed.

a. Paired sample t-test.

After carrying out the normality test and it is known that the pretest and posttest data are normally distributed, the next step is to carry out a hypothesis test, namely testing the paired sample t-test, this is done to find out whether there are significant differences in the treatment given to each of them. each individual. variable. Hypothesis testing uses IBM SPSS 26 for Windows with a significance level of $\alpha = 0.05$. The decision-making criteria taken are Reject H_0 if $T_{count} \geq T_{tabel}$, Accept H_0 if T_{count} or the significance value of both is ≤ 0.05 . The results of the hypothesis test data processing can be seen in the following table:

Table 5. Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pretest	9.00	16	.966	.242
	posttest	13.56	16	1.094	.273

Table 6. Paired Samples Test

Mean	Paired Differences				t	df	Significance		
	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				One-Sided p	Two-Sided p	
	n		Lower	Upper					
hasil pre - hasil post	-4.563	.964	.241	-5.076	-4.049	18.933	15	<.001	<.001

Based on the results of the paired sample t test, the calculated t value was -18.933 with a significance level (2-tailed) of $0.01 \leq 0.05$, indicating that there was a significant difference between the data regarding the treatment given to each variable. The ttable hypothesis can be calculated using the decision criteria for making a tcount value of -18,933 and a significant value (2-tailed) namely ≤ 001 . With the df value obtained from $16-1=15$, the ttable value is 1.753. So it can be concluded that if the tcount value \geq ttable = (-18.933 \geq 1.753) then H_a is accepted and H_o is rejected, so it can be concluded "There is significant effectiveness Smart Book Media is significant in increasing understanding of the introduction of sex education for children aged 5-6 years at the IK Nurul Qur'an Kindergarten.

b. Hypothesis Testing

Once it is known that both data are normally distributed, the hypothesis test is then carried out. Hypothesis testing was carried out using the Paired Sample T-Test method in the IBM SPSS Statistics 26 program. The Paired Sample T-Test method was used on the same group with two different data. When signing. > 0.05 and the t value $>$ t table value, then H_o is rejected and H_a is accepted. The results of the t-test analysis from this research can be seen in the following table

Table 7. Paired Sample T Test Results

Variabel	T	Df	Sig(two-sided p)	Information
Pretes and posttest	-18.933	15	<.001	There are changes

The table shows that the comparison variable has a significance value of $0.01 < 0.05$, which is in accordance with the requirements of the Paired Sample T-Test, namely H_o is rejected and H_a is accepted, meaning that there is the influence of Smart Book Media to increase understanding of sex education for children aged 5 years. -6 years at IK Nurul Qur'an Kindergarten Aceh Besar. The use of the t table can be calculated by looking at the calculated t value, namely -18.933 and the sig value. (two-sided p) namely ttable = $=(-18.933 \geq 1.753)$ So it can be concluded that H_o is rejected and H_a is accepted, namely the influence of Smart Book Media to increase understanding of the introduction of sex education for children aged 5-6 years at IK Nurul Qur' Kindergarten. in Aceh Besar.

CONCLUSION

Based on the results of research that has been carried out, namely "Effectiveness of Smart Book Media in the Introduction of Sex Education to Children at IK Nurul Qur'an Kindergarten, Aceh Besar" it can be concluded

that Smart Book Media is effective in introducing Sex Education to BI Group Children at IK Nurul Qur'an Kindergarten. Aceh Besar. This can be proven through hypothesis testing using the T-test where $t_{count} < t_{table}$ is obtained, which means H_0 is rejected and H_a is accepted. This is proven by the average value of the pre-test activity results obtained at 9 and the post-test obtained at 13.5. The results of this research indicate that Smart Book Media can increase children's understanding of sex education, which is aimed at the results of the t_{table} hypothesis which can be calculated using the decision making criteria, the t value is -18.933 and the significant value (2-tailed) is ≤ 001 with the df value obtained from $16-1= 15$, get the t_{table} value, namely 1.753. So it can be concluded that if the $t_{count} \geq t_{table} = (18,933 \geq 1.753)$ then H_0 is accepted and H_a is rejected, so it can be concluded "there is significant effectiveness between Smart Book Media for understanding sex education for children aged 5-6 years at IK Nurul Qur'an Kindergarten.

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