

## EFFECTIVENESS OF BODY MAPPING IN IMPROVING KNOWLEDGE ABOUT SEXUAL VIOLENCE PREVENTION IN GRADE 1-2 STUDENTS IN STATE ELEMENTARY SCHOOL (SD) 2 FONTEIN

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### Abstract

Elementary school children are vulnerable to becoming victims of sexual violence due to the lack of children in getting early sex education. Lack of health education about sexual violence affects children's knowledge, so efforts are needed to improve children's knowledge through health education, namely through health promotion in this study using body mapping media. This study aims to determine the effectiveness of body mapping media in increasing knowledge about preventing sexual violence in grades 1-2 at Elementary School 2 Fontein. This type of research is a pre-experimental design with a one group pretest-posttest design research design. This research was conducted at Elementary School 2 Fontein. The sample in this study was 31 people consisting of 2 classes, namely class 1 totaling 15 students and class 2 totaling 16 students. The data analysis technique used the Wilcoxon Rank Test. The results of this study indicate that body mapping media is effective in increasing students' knowledge about preventing sexual violence with a p value = 0.000 (<0.05). Based on the results of the study, it is hoped that body mapping media can be used as a learning material to increase students' knowledge about sexual violence prevention.

**Keywords:** Body Mapping, Elementary School Children, Knowledge, Sexual Violence

### Introduction

Sexual violence is any sexual act, attempt to obtain a sexual act, or other act directed against a person's sexuality by the use of coercion, by whomever and in any setting regardless of their relationship with the victim (WHO, 2024). The group that is most likely to experience sexual violence is the child group because it is considered a weak figure and has dependence on adults. This results in children becoming helpless when they experience threats not to tell what they are experiencing (Kelrey, et al., 2022). Children are also vulnerable to becoming victims of sexual violence due to the lack of sex education from an early age, so children consider that this action is not a problem (Rimawan, 2016). Children are also unable to identify dangerous situations such as unauthorized physical touching by others, how to refuse or even end interactions with suspicious people and how to ask for help if in a dangerous situation (Finkelhor in Joni & Surjaningrum, 2020).

Globally, it is estimated that up to 1 billion children aged 2-17 years have experienced physical, sexual, or emotional violence or neglect in the past year (WHO, 2022). Cases of crimes due to deviant sexual behavior also occur in Indonesia. The Ministry of Women's Empowerment and Child Protection (Kemen PPPA) noted that until March 2024, complaints of child victims of sexual violence reached 9,588 cases (Kemen PPPA, 2023). Cases of sexual violence against children also occurred in Kupang City. DP3A Kupang City recorded that in the last 2 years, namely in 2023, there were 17

cases of sexual violence against children aged 6-12 years totaling 8 cases; victims aged 13-17 years amounting to 9 cases and in 2024 there were 13 cases of sexual violence against children aged 6-12 years amounting to 5 cases; The age of the victims is 13-17 years old totaling 8 cases (DP3A Kupang City, 2024).

Sexual violence experienced by children can result in short-term and long-term adverse effects both in terms of children's physical and psychological health. Therefore, children need to be equipped with the correct knowledge about the prevention of sexual violence from an early age. Interventions to increase children's knowledge of the areas of the body that can and cannot be touched are important to be introduced from an early age so that children get a correct understanding of self-care and a clear picture of which areas of the body are allowed and which are not allowed to be touched on the body, so that children can avoid risky behaviors that exist outside of themselves (Wijayanti, 2019).

Body mapping is one of the methods that can be used to increase children's knowledge and understanding related to the prevention of sexual violence because with body mapping media, it is hoped that children will be able to know the forms of sexual violence and children will be able to know body parts and their functions. In addition, children can also know which parts of the body are or are not allowed to be touched by others, and children can wear clothes politely, and according to their gender (Nugroho, 2020).

There is one Elementary School (SD) in Kupang City, namely SD Negeri 2 Fontein which has never received socialization, education, promotion or education about the prevention of sexual violence in students, in the daily teaching and learning process carried out by teachers at SD Negeri 2 Fontein has also never provided education to students about the prevention of sexual violence, besides that the school has also never received socialization in the form of health education from the government or Non-Governmental Organizations (NGOs) regarding the prevention of sexual violence in students.

Based on the description above, the researcher is interested in conducting a study entitled "The Effectiveness of Body Mapping in Increasing Knowledge about the Prevention of Sexual Violence in Grades 1-2 Students at SD Negeri 2 Fontein".

## **Method**

The research design used in this study is a pre-experimental design with a one group pretest-posttest design approach. This research was carried out at SD Negeri 2 Fontein, Kupang City, with the time of implementation of the research in November 2024. The sampling technique in this study is total sampling. The sample taken in this study was 31 students divided into 2 classes.

The data needed in this study consists of primary data and secondary data. Primary data were obtained from the respondents' pretest and posttest questionnaires. Secondary data was obtained from the relevant agency, namely SD Negeri 2 Fontein which was related to the general overview of the research location and distribution of students. The data collection instrument used in this study is a questionnaire arranged in the form of detailed front and back body images along with numbering on each part of the body. The numbering on each part of the body is 45 points.

The data collection technique used in this study was by distributing questionnaires before (pretest) the provision of health education and after (posttest) the provision of health education through body mapping media. After the expected data is collected, data processing is carried out in stages starting from the stage of data analysis (editing), marking (coding), data entry to the computer (entry) and data cleaning (cleaning). The collected data were analyzed univariate and bivariate. Univariate analysis was carried out to get an overview of students' knowledge levels before (pretest) and after (posttest) health education was given using body mapping media which was presented in the form of frequency distribution tables and interpreted. And bivariate analysis was conducted to find out

whether body mapping media was effective in increasing knowledge about the prevention of sexual violence in students presented in the form of a table and interpreted.

## Results

### Univariate Analysis

**Table 1 Frequency Distribution Based on Respondent Characteristics**

Category	N	%
<b>Age</b>		
6 year	15	48
7 year	16	52
<b>Gender</b>		
Male	17	55
Female	14	45
<b>Class</b>		
Class I	15	48
Class II	16	52
<b>Total</b>	<b>31</b>	<b>100</b>

Table 1 shows that the most respondents are at the age of 7 years (52%) followed by 6 years old as many as 15 people (48%), then by gender the most respondents are male as many as 17 people (55%) followed by female respondents as many as 14 people (45%) and based on class 2 with 16 people (52%) followed by class 1 with 15 people (48%).

**Table 2 Frequency Distribution of Respondent Knowledge Level Before (*Pre-test*) and After (*Post-test*) Intervention**

Category	Pre-test		Post-test	
	N	%	N	%
High	1	3,2	25	80,6
Medium	18	58,1	6	19,4
Low	12	38,7	0	0
<b>Total</b>	<b>31</b>	<b>100</b>	<b>31</b>	<b>100</b>

Table 2 shows that before the intervention with body mapping media (pretest) there were 12 students who had low knowledge with a percentage of 38.7%, then there were 18 students who had moderate knowledge with a percentage of 58.1% and 1 student who had high knowledge with a percentage of 3.2%. After the intervention using body mapping media (posttest), the level of student knowledge increased, namely there were 25 students who had high knowledge with a percentage of 80.6% and 6 students who had moderate knowledge with a percentage of 19.4%.

### Bivariate Analysis

Before the bivariate analysis is carried out, a data normality test is first carried out to determine the distribution of normal or abnormal distributed data. The normality test uses the Shapiro-Wilk test. The reason for using Shapiro-Wilk is because the sample count is below <50.

The results of the data normality test in table 3 show that the data is abnormally distributed with a significance value of < 0.05.

**Table 3 Data Normality Test**

Variable	Kolmogorov-Smirnov	Information	Shapiro-Wilk	Information
<b>Knowledge</b>				
Pre-test	0.000	Abnormal	0.000	Abnormal
Post-test	0.000	Abnormal	0.000	Abnormal

Based on the results of the normality test, it was found that the data was abnormally distributed, so the test used was in the form of a Non-Parametric test, namely using the Wilcoxon Rank Test.

**Table 4 The Effectiveness of Body Mapping Media in Increasing Knowledge About Sexual Violence Prevention in Grades 1-2 Students at SD Negeri 2 Fontein**

		N	Mean Rank	Sum of Ranks
Score	Negative Ranks	0	.00	.00
<i>Pretest-</i>	Positive Ranks	28	14.50	406.00
Score	Ties	3		
<i>Posttest</i>	Total	31		
Score Posttest-Score Pretest				
Z				-4.625
Asymp.Sig. (2-tailed)				.000

Table 4 shows that the negative ranks or the difference (negative) between the level of knowledge for the pretest and posttest is 0. This value of 0 indicates no decrease (reduction) from pretest value to posttest value. For positive ranks or the difference (positive) between the level of knowledge for the pretest and posttest is 28 data (n) which means that there are 28 students who have increased knowledge from pretest scores to posttest scores. The tie value or similarity of pretest and posttest scores is 3 data (n) which means that there are 3 students who have the same score in the pretest and posttest.

Based on these results, it is known that 28 respondents are in positive ranks (posttest scores > pretest scores), where the higher the (positive) score, the better the students' knowledge, which means that body mapping media is effective in increasing knowledge about the prevention of sexual violence in students in grades 1-2 at SD Negeri 2 Fontein.

In addition, the posttest-pretest scores of health education with the media mapping output of Z were calculated at -4,625 and the Asymp.Sig. (2-tailed) of 0.000 (p-value) which means less than  $\alpha$  0.05 ( $p < \alpha$  0.05) shows that body mapping media is effective in increasing knowledge about the prevention of sexual violence in students in grades 1-2 of SD Negeri 2 Fontein.

## Discussion

This study aims to determine the effectiveness of health education with body mapping media on increasing knowledge about sexual violence prevention in students in grades 1-2 of SD Negeri 2 Fontein. Based on the results of the study, there were significant changes in the level of knowledge of students before and after being given health education. This is reflected in the distribution of data obtained through pretest and posttest.

The results of the research that has been carried out on 31 samples divided into 2 classes, namely grades 1 and 2 at SD Negeri 2 Fontein, it was found that body mapping media is effective in increasing knowledge about the prevention of sexual violence where there is an increase in knowledge before and after health education with body mapping media is shown by the percentage change in the frequency of students' knowledge levels, namely before intervention with body mapping media (pretest) There were 12 students who had low knowledge with a percentage of 38.7%, then there were 18 students who had moderate knowledge with a percentage of 58.1% and 1 student who had high knowledge with a percentage of 3.2%. After the intervention using body mapping media (posttest), the level of student knowledge increased, namely there were 25 students who had high knowledge with a percentage of 80.6% and 6 students who had moderate knowledge with a percentage of 19.4%.

In addition, based on the results of the statistical test using the wilcoxon test, a p value of  $< 0.05$  was obtained, which means that body mapping media is effective in increasing knowledge about the prevention of sexual violence in students in grades 1-2 at SD Negeri 2 Fontein.

The increase in student knowledge in this study is greatly influenced by the media used in providing health education. When providing health education with body mapping media, students quickly focus on the media because it contains images and colors that can attract students' attention. During the provision of health education, students also actively answered when given several questions about the parts of the body that could and should not be touched. So that the use of body mapping media in providing health education is able to attract students' attention in paying attention and listening to the material provided.

Interventions to increase children's knowledge of the areas of the body that can and cannot be touched are important to be introduced from an early age so that children get a correct understanding of self-care and a clear picture of which areas of the body are allowed and which are not allowed to be touched on the body, so that children can avoid risky behaviors that exist outside of themselves (Wijayanti, 2019).

Knowledge about sexuality is not necessarily obtained without the process of learning about sexuality itself. One way to be able to have and understand sex knowledge, especially in children, is to provide sexual education or sexual health education that is adjusted to the child's age (Nugroho, 2020).

Counseling or providing health education to change individual behavior is influenced by many factors. In addition to method factors such as guidance and counseling, lectures, seminars, group discussions, interviews, demonstrations, simulations, venting opinions, role playing, material or message factors, the officers who do it, as well as the aids or props or media used. In order to achieve an optimal result, these factors must work together in harmony. In the process of delivering extension materials to the target, the selection of the right method is very helpful in achieving efforts to change the behavior of the target (Notoadmodjo, 2012).

In this study, the media used is very important in the process of delivering material because it can stimulate educational goals so that it can improve and change a person's mindset for the better. Children have a saturation nature so to invite children to learn, teachers or parents usually tend to use aids or media that can attract children's attention or interest in learning (Hamdalah, 2013).

In using body mapping media, the sense of vision plays an important role in the continuity of the counseling process, where the reaction when we see a colored image, the eyes will perceive the

image seen. Then the eye will send signals from the image to the brain for further processing. In the brain, there will be a process of digesting and giving meaning. Through other information that has been stored before, the brain will try to provide a better understanding of the information provided by the eyes (Noer, 2014).

Health education with body mapping media is a media that is suitable for elementary school age children because at that age the child's brain ability has reached a concrete period where learning media such as picture story media is effective in increasing children's knowledge in elementary school, because through this media children get concrete reading materials according to their age (Azizah, 2018). Body mapping media has advantages because it contains realistic paintings or images of the human body that contain an understanding of children's body recognition as an effort so that children can take care of their bodies from an early age and avoid sexual violence.

The results of this study are in line with the research (Aprilya, 2024) where the results of the study show that out of a total of 41 respondents who have good knowledge, 31 respondents (75.6%) and 10 respondents (24.4%) have moderate knowledge about sexual violence. The results of the study using the Wilcoxon test obtained a p-value of 0.000 ( $p < \alpha$  0.05) which means that there is an influence of health education using audio-visual media and body mapping on the level of children's knowledge about sexual violence at SDN 1 Binontoan.

A similar study by Putri (2024) also found that body mapping media has an effect on improving the ability of deaf students to recognize body parts, especially in distinguishing between what is allowed and what is not allowed, touch, as evidenced by an increase in scores from pretest (average score of 54.92) to posttest (average score of 82.12) and a p-value of 0.003 ( $p < \alpha$  0.05) which means that there is an influence of health education using body mapping media on ability get to know the limbs of deaf students of SLB YRTRW Surakarta for the 2024/2025 school year.

## Conclusion

From the research that has been conducted by the researcher, it can be concluded that there is an increase in students' knowledge before (pretest) and after (posttest) health education is given based on the frequency distribution of students' knowledge levels where at the time of the pretest there were 12 students who had low knowledge with a percentage of 38.7%, then there were 18 students who had moderate knowledge with a percentage of 58.1% and 1 student who had high knowledge with percentage 3.2% and after intervention using body mapping media (posttest), the level of student knowledge increased, namely there were 25 students who had high knowledge with a percentage of 80.6% and 6 students who had moderate knowledge with a percentage of 19.4%.

Based on the results of statistical tests using Wilcoxon non-parametric tests, the level of knowledge during the pretest and posttest experienced a significant increase where there were 28 students who experienced an increase in knowledge from pretest scores to posttest scores. In addition, the post-test scores of health education with body mapping media obtained a p value of 0.000 ( $p < \alpha$  0.05) which shows that body mapping media is effective in increasing knowledge about the prevention of sexual violence in students in grades 1-2 of SD Negeri 2 Fontein.

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