



Personal Safety Skills Training: a Card Game Method and Its Effect on Knowledge Level and Self-Awareness in Preventing Child Sexual Violence

Hesty Windiantari¹, Riski Dwi Prameswari², Retno Twistiandayani³

^{1,2,3} Nursing Science Study Program, Faculty of Health Sciences, Gresik University, Gresik, Indonesia

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CORRESPONDENCE

E-mail: hestywindiantari121185@gmail.com

ABSTRACT

Child sexual abuse is a serious issue caused by children's low levels of knowledge and self-awareness in recognizing and reporting unsafe situations. This study aimed to analyze the effect of personal safety skill training using a card-playing method on children's knowledge and self-awareness in preventing sexual abuse. This study employed a pre-experimental one-group pretest–posttest design involving 38 third-grade students of MINU Lumpur Gresik as the total sample. The intervention was delivered through educational card media in three sessions, and the data were analyzed using the Wilcoxon Signed Rank Test with a significance level of 0.05. The results showed that before the intervention, most respondents had a moderate level of knowledge (84.2%) and a low level of self-awareness (65.8%). After the training, the majority of respondents experienced an improvement in knowledge to the good category (94.7%) and self-awareness to the good category (68.4%). The Wilcoxon test results showed a p-value of 0.000 ($p < 0.05$) for both knowledge and self-awareness variables, indicating that personal safety skill training through the card-playing method had a significant effect on improving children's knowledge and self-awareness in preventing sexual abuse. This study concludes that the card-playing method is effective as an interactive educational medium to improve children's ability to recognize, resist, and report. Game-based self-protection education programs need to be integrated into the school curriculum as a sustainable preventive strategy.

INTRODUCTION

Child sexual violence is a pressing global issue with multidimensional and long-term impacts. According to the World Health Organization (2022), it is estimated that up to 1 billion children aged 2–17 years worldwide experience various forms of violence, including sexual violence, within a single year. UNICEF (2024) reinforces this data by reporting that 1 in 5 girls and 1 in 7 boys experience sexual violence before the age of 18. In Indonesia, data from Simfoni-PPA up to mid-2025 recorded 13,845 cases of violence, with sexual violence being the most dominant form (The Jakarta Post, 2025). A similar trend is observed at the regional level in East Java and Gresik Regency, where sexual violence remains the most frequently reported type of violence (Harian Disway, 2025). These high numbers confirm that child sexual violence is a structural problem that has not yet been optimally addressed, particularly in terms of early prevention.

The main issue in the field shows a gap between the high risk of violence and the low level of children's knowledge and self-awareness. A preliminary study at MINU Lumpur Gresik found that most third-grade students were unable to distinguish between safe and unsafe touch and did not have the courage to report inappropriate experiences. Children at primary school age (8–9 years) are in the concrete operational cognitive stage and are highly vulnerable to grooming due to their limited ability for abstract thinking. Previously, self-protection materials have often been considered taboo or delivered in a frightening

manner, causing children to feel embarrassed and confused when facing threats (Setiawan & Lestari, 2021). Therefore, strengthening knowledge and self-awareness is crucial to equip children with the ability to recognize body boundaries, differentiate types of treatment they experience, and optimize their personal safety skills as a form of self-protection.

Annazhifah et al. (2024) demonstrated that card game-based learning methods are effective in improving knowledge and health behaviors among elementary school students through an interactive approach. In line with this, Azizzah et al. (2024) emphasized that the use of card games as a health education medium significantly improves students' knowledge and attitudes compared to conventional methods. In the context of self-protection, Divayani et al. (2025) found that personal safety skill education significantly improves children's ability to distinguish safe and unsafe touch and understand how to report incidents. In addition, audiovisual media has also been proven by Mareta (2023) to enhance children's ability to prevent sexual violence through the recognize, resist, and report framework. At early childhood levels, Puriastuti et al. (2025) showed that visual educational cards are highly effective in building awareness of violence prevention and positive character development due to their alignment with children's developmental characteristics.

The novelty of this study lies in the use of a card game method as an interactive, tactile, and flexible intervention medium. Unlike audiovisual media or storybooks, card games enable intensive two-way discussions between researchers and children, as well as among children themselves, which is essential for building self-awareness at the concrete operational cognitive stage. This educational card media is specifically designed to simplify abstract concepts of body boundaries into practical, easily understood situations. This study does not only focus on increasing knowledge but also targets self-awareness as a deeper psychological foundation that enables children not only to recognize what is wrong but also to consciously perceive threats and develop an internal drive to act.

Theoretically, self-awareness is a key component of emotional intelligence that includes recognition of body rights and feelings of discomfort as an early warning system. Based on Piaget's cognitive development theory, children aged 8–9 years require physical representations to understand moral concepts and social rules. By integrating play-based learning into safety education through the recognize, resist, and report framework, this study attempts to address the gap in child-friendly and sustainable educational methodologies. Based on this urgency, this study aims to analyze the effect of personal safety skills training using a card game method on children's self-awareness in preventing sexual violence. The findings of this study are expected to serve as a scientific reference for the development of child protection curricula based on positive psychology approaches and active learning methods.

METHOD

This study employed a descriptive-analytical design with a pre-experimental approach using a one-group pretest–posttest design. The population in this study consisted of all third-grade students of Madrasah Ibtidaiyah Nahdlatul Ulama (MINU) Lumpur Gresik in the 2025–2026 academic year, totaling 38 children. The sampling technique used was total sampling, in which all members of the population (38 children) were included as research respondents.

Data were collected using a questionnaire instrument to measure the dependent variables, namely children's knowledge and self-awareness before and after the intervention. The research instrument had undergone validity and reliability testing to ensure the accuracy of the data obtained. The research procedure began with administering a pre-test to the respondents, followed by the implementation of the independent variable intervention in the form of personal safety skills training using a card game method. The intervention used educational card media designed to be interactive to help children understand body boundaries and unsafe situations. The training was conducted in three sessions, each lasting 30–40 minutes. After the intervention was completed, a post-test using the same instrument was administered to measure changes in the level of self-awareness. The collected data were processed through several stages, including editing, coding, scoring, tabulating, and data entry. To test the research hypothesis, statistical analysis was performed using the Wilcoxon Signed-Rank Test with a significance level of $\alpha = 0.05$. This analysis aimed to determine whether there was a significant difference between pre-test and post-test results after the intervention using the card game method.

RESULT

Characteristics of Respondents

The results of the respondent characteristics data collection are presented in the following table:

Table 1. Characteristics of Respondents

Characteristics	Frequency	Percentage (%)
Gender		
Male	23	60,5
Female	15	39,5
Age		
< 9 Years	1	2,6
= 9 Years	35	92,1
> 9 Years	2	5,3
History of Sexual Violence Education		
Yes	2	5,3
No	36	94,7
Total	38	100

Based on the frequency distribution of respondent characteristics among third-grade students of MINU Lumpur Gresik, the respondents in this study were predominantly male, with 23 children (60.5%), while

female students accounted for 15 children (39.5%). In terms of age, the majority of respondents were exactly 9 years old, totaling 35 children (92.1%), while 1 child (2.6%) was younger than 9 years old and 2 children (5.3%) were older than 9 years. The most notable finding was related to the history of receiving education on sexual violence prevention, where the majority of respondents, 36 children (94.7%), reported that they had never previously received any education regarding sexual violence prevention. Only a small proportion of respondents, namely 2 children (5.3%), had been previously exposed to such information or education. These findings indicate a high need for safety education interventions in the school setting, as almost all students lack adequate knowledge regarding self-protection from sexual violence.

Knowledge Level in Preventing Sexual Violence Before Personal Safety Skills Training Using the Card Game Method

Table 2. Knowledge Level in Preventing Sexual Violence Before Personal Safety Skills Training Using the Card Game Method

Knowledge Level	Frequency	Percentage (%)
Good	5	13,2
Moderate	32	84,2
Poor	1	2,6
Total	38	100

Table 2 shows that before the personal safety skills training using the card game method was implemented, the respondents' knowledge level regarding sexual violence prevention was predominantly in the moderate category, with 32 students (84.2%). Meanwhile, 5 students (13.2%) were categorized as having good knowledge, and a small proportion, namely 1 student (2.6%), was categorized as having poor knowledge.

Self-Awareness Level in Preventing Sexual Violence Before Personal Safety Skills Training Using the Card Game Method

Table 3. Self-Awareness Level in Preventing Sexual Violence Before Personal Safety Skills Training Using the Card Game Method

Self Awareness Level	Frequency	Percentage (%)
Good	0	0,0
Moderate	13	34.2
Poor	25	65.8
Total	38	100

Table 3 shows that the majority of respondents had a low level of self-awareness in preventing sexual violence before the intervention, with 25 respondents (65.8%). Meanwhile, 13 respondents (34.2%) had a moderate level of self-awareness, and no respondents (0.0%) were categorized as having good self-awareness.

Knowledge Level in Preventing Sexual Violence After Personal Safety Skills Training Using the Card Game Method

Table 4. Knowledge Level in Preventing Sexual Violence After Personal Safety Skills Training Using the Card Game Method

Knowledge Level	Frequency	Percentage (%)
Good	36	94,7
Moderate	2	5,3
Poor	0	0
Total	38	100

Table 4 shows that after the personal safety skills training using the card game method was implemented, almost all respondents achieved a good level of knowledge, with 36 students (94.7%) in the good category. The number of students in the moderate category decreased significantly to only 2 students (5.3%), and no students (0.0%) remained in the poor category.

Self-Awareness Level in Preventing Sexual Violence After Personal Safety Skills Training Using the Card Game Method

Table 5. Self-Awareness Level in Preventing Sexual Violence After Personal Safety Skills Training Using the Card Game Method

Self Awareness Level	Frequency	Percentage (%)
Good	26	68,4
Moderate	12	31,6
Poor	0	0,0
Total	38	100

Table 5 shows that after the intervention, the majority of respondents had a good level of self-awareness, with 26 respondents (68.4%). Meanwhile, 12 respondents (31.6%) were in the moderate category, and no respondents (0.0%) remained in the poor category.

Analysis of the Effect of Personal Safety Skills Training Using the Card Game Method on Self-Awareness in Preventing Sexual Violence in Children

Table 6. Wilcoxon Signed-Rank Test Results 1 (Post-test vs Pre-test)

Test Statistics ^a	
	Post Test - Pre Test
Z	-5.488 ^b
Asymp. Sig. (2-tailed)	.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Table 6 shows that before the intervention, the majority of respondents had a low level of self-awareness, namely 25 children (65.8%), and no respondents (0.0%) were in the good category. However, after the intervention using the card game method, there was a significant improvement, where most respondents achieved a good level of self-awareness, namely 26 children (68.4%), and no respondents (0.0%) remained in the poor category. The statistical test using the Wilcoxon Signed-Rank Test showed a Z value of -5.488 with a significance level of $p = 0.000$ ($\alpha < 0.05$), indicating that there was a significant

effect of Personal Safety Skills training using the card game method on increasing children's self-awareness in preventing sexual violence at MINU Lumpur Gresik.

Alternative Wilcoxon Analysis of the Effect of Personal Safety Skills Training Using the Card Game Method on Self-Awareness in Preventing Sexual Violence in Children

Table 7. Wilcoxon Signed-Rank Test Results 2 (Post-test vs Pre-test)

Test Statistics ^a	
	Sesudah - Sebelum
Z	-5.596 ^b
Asymp. Sig. (2-tailed)	.000
a. Wilcoxon Signed Ranks Test	
b. Based on negative ranks.	

Table 7 shows similar findings, where before the intervention most respondents had low self-awareness (25 children; 65.8%), and none were in the good category (0.0%). After the intervention, most respondents had good self-awareness (26 children; 68.4%), and none remained in the poor category (0.0%). The Wilcoxon Signed-Rank Test results showed a p-value of 0.000 ($p < 0.05$), indicating that there was a statistically significant effect of Personal Safety Skills training using the card game method on improving children's self-awareness in preventing sexual violence.

DISCUSSION

Knowledge Level in Preventing Sexual Violence Before Personal Safety Skills Training Using the Card Game Method

Based on the results of the study, it was found that before the personal safety skills training using the card game method was implemented, most children had a moderate level of knowledge regarding sexual violence prevention, while a small proportion had a low level of knowledge. These findings indicate that prior to the intervention, students' understanding of sexual violence prevention was still not optimal.

According to Notoatmodjo (2018), a child's level of knowledge is influenced by several factors, such as age, experience, environment, information exposure, and health education received. Knowledge can improve when individuals obtain sufficient information through education or learning experiences. The lack of exposure to information regarding personal safety skills caused children to have limited understanding of forms of sexual violence, self-protection strategies, and appropriate actions when facing dangerous situations.

In the researcher's view, the moderate level of knowledge among respondents before the intervention was due to the fact that sexual violence prevention materials are rarely specifically provided to school-aged children. In addition, children tend to have limited understanding of body boundaries and self-protection

when they have not received age-appropriate education. Therefore, an engaging and child-friendly learning method such as a card game is needed to improve the effectiveness of information delivery.

Self-Awareness in Preventing Sexual Violence Before Personal Safety Skills Training Using the Card Game Method

The study showed that before the intervention, most children had a low level of self-awareness in preventing sexual violence, and none of the children had a good level of self-awareness. These findings indicate that students' awareness in recognizing and preventing sexual violence was still low prior to the intervention.

According to Goleman & Davidson (2022), self-awareness is the ability of individuals to recognize themselves, understand their surroundings, and be aware of potential threats that may endanger them. Self-awareness is a core component of emotional intelligence that enables individuals to understand their feelings, thoughts, and appropriate responses in different situations. In school-aged children, self-awareness is still developing and requires appropriate stimulation and education to help them recognize harmful behaviors, including sexual violence.

In the researcher's opinion, the low level of self-awareness among respondents before the intervention was due to insufficient education regarding self-protection and body boundaries. In addition, elementary school children tend to have high levels of trust toward people around them, making it difficult for them to identify potentially dangerous situations. The lack of training in refusal skills, recognizing inappropriate touch, and seeking help also contributed to the low level of self-awareness.

Knowledge Level in Preventing Sexual Violence After Personal Safety Skills Training Using the Card Game Method

The results showed that after the personal safety skills training using the card game method, almost all respondents achieved a good level of knowledge, and none remained in the poor category. These findings indicate a significant improvement in students' knowledge after the intervention.

According to Notoatmodjo (2018), knowledge is the result of human sensory perception of an object, primarily through sight and hearing. The use of card game media allows students to more easily receive information because it involves visual activities, communication, and active participation during the learning process. In addition, game-based learning can improve children's concentration and memory retention.

In the researcher's view, the success of the card game method in improving students' knowledge was due to its ability to create a fun and non-monotonous learning environment, which increased students' enthusiasm. School-aged children tend to understand material more effectively through play-based activities rather than conventional lecture methods. Through the card game, students were able to understand personal safety skills in a simple and memorable way.

Self-Awareness in Preventing Sexual Violence After Personal Safety Skills Training Using the Card Game Method

The study found that after the intervention, most children had a good level of self-awareness, and none remained in the poor category. These results indicate an improvement in students' self-awareness after the training.

According to Goleman & Davidson (2022), interactive health education methods can help improve children's awareness of potentially dangerous situations. Daniel Goleman also emphasizes that self-awareness involves recognizing emotions, understanding one's condition, and determining appropriate actions in response to situations. Through personal safety skills training, children are taught to recognize body boundaries, understand unsafe behaviors, and learn how to protect themselves when facing potential sexual violence.

In the researcher's opinion, the card game method is effective in improving self-awareness because it creates an active and enjoyable learning atmosphere. Children are able to understand the material more easily because learning is delivered through games that match their developmental stage. In addition, the use of cards helps students remember key self-protection concepts such as saying "no," avoiding dangerous situations, and seeking help from trusted adults.

Effect of Personal Safety Skills Training Using the Card Game Method on Self-Awareness in Preventing Sexual Violence in Children

The results showed that before the intervention, most respondents had a low level of self-awareness (25 children; 65.8%), and none were in the good category. However, after the intervention, there was a significant improvement, where most respondents achieved a good level of self-awareness (26 children; 68.4%), and none remained in the poor category. The Wilcoxon Signed-Rank Test showed a Z value of -5.488 with a significance level of $p = 0.000$ ($\alpha < 0.05$), indicating a statistically significant effect of personal safety skills training using the card game method on improving children's self-awareness in preventing sexual violence at MINU Lumpur Gresik.

These findings are consistent with theories stating that interactive learning methods can improve children's understanding and awareness of health-related behaviors. According to Goleman & Davidson (2022), self-awareness is the ability to recognize oneself, understand the situation faced, and determine appropriate actions against threats or dangers in the environment. Personal safety skills training helps children recognize body boundaries, understand safe and unsafe touch, and develop the courage to refuse and report inappropriate behavior.

In the researcher's opinion, the increase in self-awareness occurred because the card game method successfully engaged students actively during the learning process. Children were able to understand the material more easily because information was delivered through visual media and play-based activities.

Repetition through games also helped students remember self-protection strategies and improved their ability to respond to potential threats.

Effect of Personal Safety Skills Training Using the Card Game Method on Self-Awareness in Preventing Sexual Violence in Children

The findings showed that before the intervention, most children had a low level of self-awareness (25 children; 65.8%), and none were in the good category. After the intervention, there was a significant improvement, with most children achieving a good level of self-awareness (26 children; 68.4%), and none remaining in the poor category. The Wilcoxon test results showed a significance value of $p = 0.000$ ($p < 0.05$), indicating a significant effect of the intervention on improving children's self-awareness in preventing sexual violence.

These results are in line with theories stating that health education delivered through active and engaging learning methods can improve children's awareness of self-protective behaviors. According to Goleman & Davidson (2022), self-awareness involves understanding one's condition, recognizing emotions, and identifying appropriate actions in different situations. Through personal safety skills training, children are taught about body ownership, unsafe behaviors, and strategies to protect themselves from sexual violence. In the researcher's opinion, the card game method is effective because it creates a fun and non-threatening learning environment. Elementary school children are more interested in game-based learning than lecture-based methods, making the material easier to understand and retain. In addition, the method encourages active participation, discussion, and practice in recognizing dangerous situations and refusing inappropriate behavior.

CONCLUSION

This study found that card game-based personal safety skills training was associated with significant improvements in children's knowledge and self-awareness regarding sexual violence prevention. Following the intervention, most participants achieved good levels of both knowledge and self-awareness. These findings suggest that an interactive card game may be a promising, child-friendly approach to delivering personal safety education in elementary school settings. Further studies with larger samples, longer follow-up periods, and controlled designs are recommended to confirm the effectiveness and sustainability of this intervention.

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