Original Research

Effective Sexual Education Model for Preventing Sexual Violence in Children

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**Article Info**

**Abstract**

*Introduction:* Children are vulnerable to sexual abuse because they are physically weak and cannot defend themselves. Threats to withhold reporting occurrences also frighten people. Sexual violence is usually done by family, neighbors, or relatives. The study aimed to investigate the effectiveness of developing a sexual health education model toward the knowledge and attitude of mothers.

**Methods:** The research method used Quasi-Experimental with nonequivalent Control Group Design. A total of 60 mothers were divided into education and control groups. Knowledge and attitude questionnaires were used. T-test and Wilcoxon Signed Rank Test were used to analyze the difference between the pre-post test within group.

**Results:** The study found that 33 respondents (55%) in the pre-test treatment group had a low knowledge level, and 44 respondents (73.3%) in the post-test treatment group (p = 0.001). The attitude of the respondents in the pre-test treatment group showed that most were poor, 60 respondents (100%), and 31 respondents (51.7%) in the post-test treatment group were poor (0.073). Most of the respondents in the pre-test control group had a low knowledge level of 32 respondents (53.3%), and the post-test control group had a high level of knowledge of 31 respondents (52.1%) (p= 0.000). Most respondents in the pre-test control group had a poor attitude, with 34 respondents (56.7%), and the post-test control group had a good attitude, with 33 respondents (55%) (p = 0.000).

**Conclusion:** The module on sexual development education for children cannot affect people’s views on teaching children sexual development.

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INTRODUCTION

In 2015, the Indonesian Commission for the Protection of Children (KPAI) reported a total of 2,898 incidents of violence against children, with sexual abuse accounting for 62% of these cases. There has been a notable increase in the number of cases from 2014 to 2,737, with some instances remaining unreported [1].

The findings of a study conducted among high school students in the province of Bali revealed that the majority of respondents belong to one of three categories: 140 (70%), 58 (29%), and less than 2 (1%).[2] However, it is essential to note that a significant number of respondents, precisely 58 (29%), have sufficient knowledge in this category. In comparison, only 2 (1%) are susceptible to becoming victims of sexual abuse or perpetrators of sexual assault. Children who experience sexual abuse may be subjected to several forms of mistreatment, such as being subjected to abuse, being subjected to bullying, being targeted with derogatory language (such as "my dear," "my love," or "my honey"), being exposed to pornographic videos by their friends, and being compelled to engage in sexual intercourse by another individual [2].

According to the findings of a qualitative study, interviews conducted revealed several instances where individuals aged 13 to 20 years were identified as perpetrators of sexual assault. The offender confessed to regularly viewing explicit films on platforms such as YouTube, Instagram, Facebook, and Twitter. The offender experienced sexual arousal. The family circumstances of sexual violence victims are predominantly detached from their familial environment [3].

In a research study that examined the influence of sexual education on the prevalence of sexual violence among children, it was observed that 23 participants (35.9%) had encountered instances of sexual violence before receiving treatment [4]. However, following three sessions of sexual health education, a significant majority of respondents (82.2%) reported no instances of sexual violence [4].

Children are considered a susceptible demographic when it comes to experiencing sexual abuse due to their perceived physical limitations that render them incapable of physically combating those of greater strength [5]. Additionally, individuals suffer fear when faced with threats to withhold reporting of the incidents they have encountered. Sexual violence cases are typically committed by someone near the victim, including members of the immediate family, neighbors, and relatives [6]. Parents provide ongoing sexual education to children, ensuring that they receive appropriate knowledge tailored to their age [7].

Early sexual education is provided to children to ensure their comprehension of safeguarding their body parts from external threats. Sex education is imparted to children through narratives utilizing both visual and non-visual aids, with a consistent and ongoing approach to enhance retention and comprehension [8]. Parents are also encouraged to enhance their knowledge and abilities to engage in this educational process effectively. The provision of age-appropriate sex education to youngsters [7]. Parents
should provide early sex education to children, as it is crucial for them to acquire knowledge on how to protect themselves from sexual violence. By imparting sexual education, parents can prevent their children from downplaying the importance of this information and instead encourage them to seek guidance from peers, including peers of their age, who may have doubts about their truth and how to communicate it. Parents can effectively provide sexual education to their children by employing suitable delivery techniques that align with the child's age.

**METHODS**

The research employed the quasi-experimental design with a nonequivalent control group. This method consists of two distinct groups. The first group, referred to as the intervention group, is provided with a module that encompasses various aspects related to sexual violence.

The study sample consisted of mothers affiliated with the PKK in the Karangasen and Bangli districts. The intervention group consisted of 30 respondents from the Jasri traditional village in Karangasem Regency, while the control group consisted of 30 respondents from the Pakuwon hamlet in Cempaga sub-district, Bangli Regency. The control group was also conducted in the Jasri traditional village in Karangasem Regency, with 30 respondents, and the Pakuwon hamlet in Cempaga sub-district, Bangli Regency, with 30 respondents. Participants were randomly chosen and grouped.

**Intervention**

The sexual education module includes information on the concept of sexual violence, the frequency of incidents of sexual violence, the types of violence commonly experienced by children, the consequences of physical violence, sexual violence, and emotional violence experienced by children. Additionally, the module explores strategies for children to avoid engaging in violent behavior and the role of parents in educating their children to protect themselves against physical, sexual, and emotional violence. The second group, known as the control group, is exposed to a video presentation that focuses on the concept of preventing sexual violence against children.

**Instruments**

The instrument employed for assessing knowledge level is a questionnaire of 23 statements. A value of 1 is assigned to a positive statement when appropriately answered, and 0 is assigned to a negative statement when answered erroneously. The validity of the questionnaire was assessed, yielding a range of values between 0.380 to 0.513. The 23 statement items in the questionnaire were deemed valid as they were above the threshold of 0.361 in the table. Additionally, the questionnaire demonstrated reliability with a Cronbach's alpha value of 0.77.

The instrument employed for assessing attitudes is a questionnaire of 19 statement questions, each accompanied by a set of answer options: strongly agree, 4, agree, 3, disagree, 2, strongly disagree, 1 (indicating a
positive statement), and strongly agree, 1, agree, 2, disagree. If the statement is negative, provide a score of 3 for strongly disagree and a score of 4. The validity of the attitude-measuring questionnaire was assessed, yielding a result ranging from 0.420 to 0.521. The validity of the 19 statement questions was determined based on their acquired value exceeding the critical value of 0.361 from the \( r \) table. Additionally, the reliability of the questionnaire was established with a Cronbach’s alpha coefficient of 0.71.

**Data analysis**

The researchers thoroughly examined the completeness of the respondents' questionnaires and processed the acquired data. The data were tabulated and edited using SPSS 24 software (IBM Corp., Armonk, NY, USA). The descriptive analysis described respondents' characteristics such as mean, median, mode, minimum, maximum, and standard deviation of the pre-post-test variables. The T-test and Wilcoxon Signed Rank Test were used to analyze the difference in the pre-post test within the group. A significant level was considered as \( p<0.05 \).

**Ethical considerations**

The study has been granted ethical approval in accordance with the reference number LB.02.03/EK/KEPK/0376/2022, which was issued on May 13th, 2022. Before data collection, signed informed consent was obtained from all participants.

**RESULTS**

Based on Table 1, it was found that the average knowledge score of respondents in the pre-test treatment group was 17.38. The median knowledge score was 20, the mode knowledge score was 22, the lowest knowledge score was 1, and the highest score was 23, with a standard deviation of 6.19. Based on the results of Kolmogorov-Smirnov, the knowledge score is not normally distributed, with a \( p \)-value of 0.000. The average knowledge score of respondents in the post-test treatment group was 20.58, the median knowledge score was 22, the mode of knowledge score was 23, the lowest knowledge score was 2, and the highest score was 23, with a standard deviation of 3.94. Based on the results of Kolmogorov-Smirnov, the knowledge score is not normally distributed with a \( p \)-value of 0.000.

Based on Table 1, it was found that the average attitude score of respondents in the pre-test treatment group was 59.13, the median attitude score was 58, the mode attitude score was 53, the lowest attitude score was 49, the highest score was 73, with a standard deviation of 5.90. Based on the results of Kolmogorov-Smirnov, the attitude score was normally distributed with a \( p \)-value of 0.081. The average attitude score of respondents in the post-test treatment group was 61.16, the median attitude score was 61, the mode attitude score was 66, the lowest attitude score was 37, and the highest score was 76, with a standard deviation of 6.28. Based on the results of Kolmogorov-Smirnov, the attitude score was normally distributed with a \( p \)-value of 0.200.
Based on Table 2, it was found that the level of knowledge of respondents in the pre-test treatment group was the highest, with 33 respondents (55%) having a low level of knowledge and 27 respondents (45%) having a high level of knowledge. The respondents with respondents with the highest level of knowledge in the post-test treatment group had a high level of knowledge, while 44 respondents (73.3%) and 16 respondents (26.7%) had a low level of knowledge. Based on the Wilcoxon Signed Ranks Test, the P-value was 0.001, which means that the hypothesis was accepted that there was an influence of education to prevent sexual violence in children on increasing mothers' knowledge to prevent sexual violence in children.

It found that the attitude of the respondents in the pre-test treatment group had the largest number of less than 60 respondents (100%), and 0 respondents (0%) had a good attitude. The attitude of the respondents in the post-test treatment group was the highest, with 31 respondents (51.7%) and 29 respondents (48.3%) having a good attitude. Based on the paired sample T-test, the P-value was obtained at 0.073, which means that the hypothesis was rejected that there was no effect of education to prevent sexual violence in children on mothers' readiness to prevent sexual violence in children.

Based on Table 3, it was found that the average knowledge score of pre-test control group respondents was a mean of 17.38, a median knowledge score of 20, a mode of knowledge score of 22, the lowest knowledge score of 1, the highest score of 23, with a standard deviation of 6.19. Based on the results of Kolmogorov-Smirnov, the control group's post-test knowledge scores were not normally distributed, with a p-value of 0.000. The average knowledge score of post-test control group respondents was a mean score of 16.11, a median score of 18, a mode of knowledge score of 21, the lowest knowledge score of 1, and the highest score of 23, with a standard deviation of 6.47. Based on the results of Kolmogorov-Smirnov, the control group's post-test knowledge score was not normally distributed with a p-value of 0.001.

Based on Table 3, it was found that the average attitude score of pre-test control group respondents was a mean of 65.15, a median attitude score of 67, a mode of attitude score of 68, the lowest attitude score of 55, the highest score of 74, with a standard deviation of 5.37. Based on the results of Kolmogorov-Smirnov, the attitude score had a normal distribution with a p-value of 0.000. The average attitude score of post-test control group respondents was 59.86, with a median attitude score of 67, a mode of attitude score of 61, the lowest attitude score of 41, and the highest score of 74, with a standard deviation of 7.64. Based on the results of Kolmogorov-Smirnov, the attitude score was normally distributed with a p-value of 0.069.

Based on Table 4, it was found that the pre-test control group respondents' knowledge level was the highest, with 32 respondents (53.3%) having a low level of knowledge and 28 respondents (46.7%) having a high level of knowledge. The post-test control group respondents had the highest level of knowledge, while 31 respondents (52.1%) and 29 respondents
(48.8%) had a low level of knowledge. Based on the Wilcoxon Signed Ranks Test, a P-value of .000 was obtained, which means that the hypothesis was accepted that there was an influence of education to prevent sexual violence in children on increasing mothers' knowledge to prevent sexual violence in children. It was found that 34 respondents (56.7%) had poor attitudes in the pre-test control group, and 26 respondents (43.3%) had good attitudes. The attitude of the respondents in the post-test control group was that 33 respondents (55%) had a good attitude, and 27 respondents (45%) had a poor attitude. Based on the paired sample T-test, a P-value of .000 was obtained, which means that the hypothesis is accepted that there is an influence of education to prevent sexual violence in children on the mother's readiness to prevent sexual violence in children.

### Table 1

Pre-Post-Test of Knowledge and Attitude Score of Intervention Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Min</th>
<th>Max</th>
<th>SD</th>
<th>p-Value</th>
</tr>
</thead>
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<tr>
<td>Pre-Test</td>
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<td>22</td>
<td>1</td>
<td>23</td>
<td>6.19</td>
<td>.000</td>
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<tr>
<td>Post-Test</td>
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<td>22</td>
<td>23</td>
<td>1</td>
<td>23</td>
<td>3.94</td>
<td>.000</td>
</tr>
<tr>
<td><strong>Attitude</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Test</td>
<td>59.13</td>
<td>58</td>
<td>53</td>
<td>49</td>
<td>73</td>
<td>5.90</td>
<td>.081</td>
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<tr>
<td>Post-Test</td>
<td>61.16</td>
<td>61</td>
<td>66</td>
<td>37</td>
<td>76</td>
<td>6.28</td>
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### Table 2

Cross Tabulation Pre-Post-Test of Knowledge and Attitude of Intervention Group

<table>
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<th>P-Value</th>
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<td>Knowledge</td>
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<td>f</td>
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<td>45</td>
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<td>Fair</td>
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<td>55</td>
<td>16</td>
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<tr>
<td>Attitude</td>
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<td>0</td>
<td>29</td>
</tr>
<tr>
<td>Poor</td>
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<td>100</td>
<td>31</td>
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</tbody>
</table>
Table 3

Pre-Post-Test of Knowledge and Attitude Score of Control Group

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Min</th>
<th>Max</th>
<th>SD</th>
<th>p-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Pre-Test</td>
<td>17.38</td>
<td>20</td>
<td>22</td>
<td>1</td>
<td>23</td>
<td>6.19</td>
<td>.000</td>
</tr>
<tr>
<td>Post-Test</td>
<td>16.11</td>
<td>18</td>
<td>21</td>
<td>1</td>
<td>23</td>
<td>6.47</td>
<td>.001</td>
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<tr>
<td>Attitude</td>
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<tr>
<td>Pre-Test</td>
<td>65.15</td>
<td>67</td>
<td>68</td>
<td>55</td>
<td>74</td>
<td>5.37</td>
<td>.000</td>
</tr>
<tr>
<td>Post-Test</td>
<td>59.86</td>
<td>67</td>
<td>61</td>
<td>41</td>
<td>74</td>
<td>7.64</td>
<td>.069</td>
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</table>

Table 4

Cross Tabulation Pre-Post-Test of Knowledge and Attitude of Control Group

<table>
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<th>Variables</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>P-Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>- High</td>
<td>28</td>
<td>46,7</td>
<td>31</td>
</tr>
<tr>
<td>- Low</td>
<td>32</td>
<td>53,3</td>
<td>29</td>
</tr>
<tr>
<td>Attitude</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>- Good</td>
<td>26</td>
<td>43,3</td>
<td>33</td>
</tr>
<tr>
<td>- Poor</td>
<td>34</td>
<td>56,7</td>
<td>27</td>
</tr>
</tbody>
</table>

DISCUSSIONS

The research findings indicate that the pre-test control group exhibited the highest level of knowledge, with 32 respondents (53.3%) demonstrating a low level of knowledge and 28 respondents (46.7%) showing a high level of knowledge. In the post-test control group, the respondents exhibited varying levels of knowledge. Among them, 31 respondents (52.1%) demonstrated a high level of knowledge, while 29 respondents (48.8%) exhibited a low level of knowledge. The obtained P-value of 0.000 indicates that the hypothesis, which posits an effect of preventive education, was accepted. The focus of this study is to enhance maternal awareness to mitigate instances of sexual abuse against children.

Child sexual violence is a global health issue. The emotional and physical well-being of children can be significantly impacted by instances of sexual violence [6]. The emotional consequences encompass a range of affective states, such as fear, confusion, anger, post-traumatic stress disorder (PTSD), feelings of insecurity, low self-esteem, hatred towards men, anxiety, depression, body image issues, cognitive impairments, impaired social skills, substance misuse, and a heightened
interest in sexual behavior. These effects may contribute to the potential for children to engage in sexual violence as adults [9]. The observed physical effects encompass reduced hunger, redness, persistent urinary retention, excessive urination, constipation, unintended pregnancy, vaginal, penile, rectal, and sexually transmitted infections (STIs) [6].

The significance of parental involvement in mitigating instances of sexual abuse against children cannot be overstated. Parents play a crucial role in imparting knowledge to children, particularly in the area of sexual education throughout their early years [10]. Parents play a crucial role in mitigating instances of sexual violence against children by imparting a clear comprehension of permissible and impermissible behaviors, particularly those of a sexual nature involving others [11]. However, a subset of parents experience confusion and lack clarity on the appropriate timing and approach to initiate such conversations. Some parents even hold the belief that engaging in conversations about sexual matters with their children is inappropriate. Consequently, parents must possess sufficient knowledge and attitudes about the prevention of sexual violence against children [12]. Parents' comprehension of their children's sexuality can foster a favorable disposition while imparting sex education to them [13].

The research findings indicate that the pre-test treatment group had a low degree of knowledge among respondents, while 33 respondents (55%) and 27 respondents (45%) showed a high level of knowledge. The post-test treatment group exhibited a high level of knowledge among respondents, with 44 individuals (73.3%) demonstrating a high level of knowledge and 16 individuals (26.7%) displaying a low level of knowledge. The Wilcoxon Signed Ranks Test yielded a P-value of 0.001, indicating a significant impact of education on the prevention of sexual violence against children. This was demonstrated through the implementation of modules aimed at enhancing mothers' knowledge to prevent sexual violence against children. The findings of this study align with previous research on the efficacy of booklet media for sexual violence prevention education [14]. The booklet media was suitable for student use, considering factors such as page count, design, color, letter type and size, paper quality, substance, message, and depth of content communication [14].

The findings of this study align with the former research on media-based extension, demonstrating a notable enhancement in knowledge and skills as evidenced by the outcomes of pre-post-test extension activities [15]. His research on using audio-visual media, in extension, also supports the current research findings. Media utilization yields highly efficacious outcomes in augmenting knowledge after receiving counseling [16]. The findings of a study conducted by researchers indicate that the utilization of picture media for sexual education might significantly enhance comprehension of sexual education \((z=\text{-3.727, } p=0.000 < 0.05)\) [17]. This is further corroborated by a study, which demonstrates that animated video media has a significant impact on enhancing students' understanding of the consequences of engaging in unrestricted sexual activity, as indicated by a P-value of 0.000 [18].
Paivio determined that the utilization of visual stimuli yields superior learning outcomes in the domains of memory retention, recognition, and the establishment of connections between facts and concepts [19]. He also asserted that humans had two distinct memory systems: one for processing verbal symbols and another for absorbing nonverbal visuals. Consequently, incorporating the sense of sight and engaging other senses in the learning process will provide more advantageous outcomes. This aligns with the findings of our performed research, specifically focusing on the efficacy of media modules and films in delivering education on the prevention of sexual violence against minors. The use of additional tools or media can enhance the dynamism of the learning process and facilitate the attainment of the desired objectives [19]-[21]. Information transmission is subject to the influence of the employed methodologies and media. Utilizing suitable techniques and platforms to communicate information can significantly enhance knowledge acquisition. Image media is a sort of media that facilitates the reception of easily transmitted information. By utilizing images or animations, individuals are more engaged and comprehend the provided material more effortlessly. In addition, using YouTube as a social media platform for knowledge dissemination can enhance individuals' language proficiency, creativity, inquisitiveness, and focus [7].

The research findings indicate that all 60 respondents in the pre-test treatment group exhibited a poor attitude, whereas none displayed a good one. The post-test treatment group demonstrated the greatest poor attitude among the responders. A total of 31 participants (51.7%) and 29 participants (48.3%) had a good attitude. The obtained P-value of 0.073 indicates that the hypothesis was rejected, suggesting that there is no significant impact of education on the prevention of sexual violence in minors. In relation to the readiness of mothers in mitigating instances of sexual violence against children. The research findings indicate a significant increase in attitudes from the pre-test to the post-test. Among the respondents, 60 expressed the most poor attitudes, while no expressed any good attitudes. In the post-test, 31 respondents expressed the most poor attitudes, while 29 expressed good ones. However, the p-value of 0.073 suggests that the violence prevention education module had a significant impact. The effective utilization of sexual violence in children to alter parents' attitudes toward educating them about preventing sexual violence in children is currently lacking.

The study’s findings indicate that 34 participants (56.7%) exhibited poor attitudes within the pre-test control group, whereas 26 participants (43.3%) demonstrated good attitudes. In the post-test control group, 33 respondents (55%) exhibited a good attitude, while 27 (45%) displayed a poor attitude. A p-value of 0.000 was obtained. The hypothesis was confirmed, indicating that education has an impact on mothers' preparedness to prevent sexual violence against children, hence preventing sexual violence in children. The research findings indicate a significant increase in attitudes from the pre-test. Specifically, 34 respondents exhibited a poor
attitude, while 26 displayed a good one. In the post-test, 33 respondents maintained a good attitude, while 27 displayed a poor one. The p-value of 0.000 suggests that the prevention education video had a significant impact. The utilization of sexual violence against children as a means to effectively alter parental attitudes toward educating children about the prevention of such violence can yield significant outcomes.

LIMITATIONS

This study lacks several important components. First, the sample size may not accurately reflect the whole village or district population. A larger sample size is recommended. Second, in-depth data analysis is required to determine the magnitude of the intervention's effect.

IMPLICATIONS

People should always pay attention to what children are doing and offer them physical and psychological support. Individuals actively promote sexual education to children. To prevent sexual dysfunction in children, parents actively teach their children self-protection. The objective of the Instansi Dinas Pemberdayaan Perempuan dan Perlindungan Anak is to actively educate the public about the importance of preventing sexual abuse in children.

CONCLUSION

Improving parents' knowledge of how to prevent sexual harassment in their children is one goal of sexual harassment education modules. It is not possible to adequately use the module on sexual development education for children to change people's attitudes about teaching children sexual development.

REFERENCES


