

How Animated Videos and the Snakes–Ladders Game Can Prevent Sexual Abuse in Children

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Abstract

Cases of sexual harassment in children have significantly increased in the last year, including in Bali. This is due to, among other considerations, a lack of knowledge in children related to sexual health as a means of prevention. As a precedent to behavioral changes, cognitive conditioning must be enforced, therefore the aim of this study was to analyze the effectiveness of using videos and game as learning media. The intervention included providing animated videos and a modified snakes and ladders game. The subjects were all students (N=37) in grades 5 and 6 at SD 2 (primary school) Sidan-Gianyar Bali. Statistical analysis of pre and post test data showed a significant difference between students' knowledge before and after the intervention. The level of sexual health knowledge of students' also increased in both grades. Increasing knowledge through these methods may help children anticipate sexual abuse as a means of prevention.

Keywords: sexual abuse, animated videos, snake–ladder game

1. BACKGROUND

There has been a significant increase in the cases of child sexual abuse over the last several years. This increase does not only have a numerical implication but also a subjective one. Over time, the modes and actions of sexual harassment committed by perpetrators have become more inhumane. Based on data from the Bali Women and Child Abuse Victims Handling and Service Team (TP2KTKPA), up to now there have been eight cases of sexual harassment in children ages 3.5 to 18 years old, and there are three other cases of sexual abuse that have not been revealed (Parama, 2016)

In general, victims of sexual abuse are teenage girls and children. This is because they do not have a proficient understanding of sex education and sexual harassment; including which behaviors should be avoided, and the potential consequences of such actions. In addition, children and adolescents tend not to have the power to reject the advances of perpetrators, especially when the perpetrators threaten the victims physically and psychologically (Bahri & Fajriani, 2015).

The rise in abuse cases, especially in children and adolescents, must be prevented. Prevention of sexual harassment can be done through socializing the importance of

sexual education. This can be started from teaching sexual education to children in the 5th and 6th grades of elementary school. The reason for giving early sexual education to children in the 5th grade is because these children experience puberty during this phase of life, and need to be given knowledge about sexuality so the children are no longer victims of sexual abuse. Through increasing their understanding of sexuality, it is hypothesized that there will be a reduction in the incidence of sexual harassment in the community.

Before behavioral changes, there must be an improvement of cognitive awareness. Some techniques that can be employed to increase the knowledge of children is through play. In this study, the sexual education was implemented through the snakes - ladders game, which was modified to include information about sexuality. This alternative was modified from the Wulanyani (2013) study on elementary school students in Gianyar Bali which demonstrated that this game succeeded in increasing health knowledge. In the study, the non-treatment group received a lecture on sexuality, while the treatment group was given the snakes - ladders game to play at school. The researchers found a very significant difference between the lecture group and the game group. It was concluded that there was an increase in knowledge through health lectures, but there was not as large of an increase in knowledge through the game of snakes and ladders.

2. METHOD

The research subjects were 37 elementary school students from the 5th and 6th grade at SD Sidan, Gianyar, Bali. The method used in this study was a pre and post-test design. The intervention was watching animated videos about sexuality for the 5th grade students and an educational game of snakes and ladders for the 6th grade students. Before and after the intervention, students were asked questions about sexuality.

2.1 Instrument 1: Animated Videos

The titles for the compilation of videos were "The Story of Mela and Miko", "Promotion of Child Protection", "Sex Education for Children", "Education to Prevent Sexual Harassment in Children", and the last video was titled "This Song Is My Body". The duration of the intervention took 60 minutes to watch.

2.2 Instrument 2: The Snakes and Ladder Game

The snakes and ladders game contained 15 questions and pictures about sexuality, in accordance with the current elementary school curriculum, such as preparing themselves for puberty, how to prevent themselves from becoming victims of sexual abuse, as well as knowing the functions and names of their sexual organs.

Students were divided into groups of four, and each group received a set of snakes – ladders, which contained one playing pad, dice, pawns, 15 question and answer cards, and game procedures. Briefly, the game was played on a gridded board, with "ladders" and "snakes" connecting specific board squares. The objective of the game was to navigate the player's game piece from the starting square to the final square based on a roll of the die. Encountering a snake or ladder would hinder or help the player's progress. Information on sexual health was included on some squares. When a player's game piece landed on one of these squares, the player would take a card containing one of the questions regarding sexual health and verbally answer the question. Another player would confirm whether or not the response was correct based on the answer written on a duplicate card containing both the question and correct answer. The confirming player would then read the correct answer aloud. The player would then move their game piece forwards or backwards depending on whether or not their response was correct.

3. RESULTS AND DISCUSSION

The following are the results of the two activities:

3.1 Watching Animated Videos about Sexuality

During the process of answering the pre-test questions, students seemed confused with the questions given because 5th grade students had not received material about sexuality and puberty.

The students were very enthusiastic and listened well to the animated video that was played. Entering the last video entitled "This Song is My Body" the students were very enthusiastic and excited to sing along with the lyrics displayed on the video, because the songs played were quite popular among children, so students were able to follow the song well. It was hoped that the meaning of the songs could be understood and disseminated to the participants' friends.

After the video watching session was finished, the facilitator reviewed the material presented in the video. Overall, the students understood the message conveyed in the video. This is reflected in the students being able to answer questions that were asked. Post-tests were given at the end of the session to see the effectiveness of providing the video for the prevention of sexual harassment in elementary students.

Based on the results of the T test for the pre- and post-tested 5th grade students, the researchers found that there were significant differences in the average value between the pre-test (mean = 18.52, SD = 12,484) and post-test (Mean = 43.52, SD = 15,253) with $t = -8.990$; $sig = 0.000$. This means that there was an effect on the students for using the animated videos to increase their sexual health knowledge.

3.2 The Snakes and Ladders Game for Sexual Education

The observation results showed that the students were very enthusiastic and seemed happy in playing this snakes and ladders game. Based on the results of the paired T test, on the pre- and post-test of 6th grade students, the researchers found that there were differences in the mean values between the pre-test (mean = 50.69, SD = 18,395) and post-test (Mean = 82.56, SD = 15,297) with $t = -8.965$; $sig = 0.000$. This means that the students were influenced by the use of the snakes and ladders game.

Based on the results of the two methods used, overall, differences in the average scores between the *pre-test* and *post-test* for both the 5th grade and 6th grade students were found. The average post-test was higher than the average pre-test. These findings demonstrate that both methods supported the students' knowledge of sexuality. In addition, analysis was also carried out between the pre-test of the 5th and 6th graders, as well as their post-tests.

The independent T-test results for the pre-tests of both the 5th and 6th grade students showed that there were differences in the average scores between the 5th and 6th graders, with an average difference of 32,164 ($p = 0.000$). This means that there was a difference in the level of preliminary knowledge for the 5th and 6th grade students on sexuality. One of the differences was caused by the current curriculum. The 5th grade students, in accordance with the current curriculum, have not received material on sexuality, while 6th grade students have received

material on sexuality, so this influenced the higher average score of the 6th grade students (50.69) more than the average score of the 5th grade students (18.52).

The changes in the knowledge scores of the 5th grade (mean = 37.71; SD 16,472) and 6th grade (Mean = 32.81; SD 16,465) students did not have a significant difference ($t = 0.897$; $p > 0.05$), however the scores of both the 5th and 6th graders significantly increased.

Based on the data categorization, the average knowledge of 5th grade students increased from the Low to Medium category, while the average knowledge of the 6th grade students increased from the Medium to High category.

Knowledge was gained through the use of the learning media. Learning media in general is a tool for teaching and learning, which can stimulate thoughts, feelings, attention and abilities, or skills of the students (Woolfolk, 2001). There are a number of objectives using learning media, namely facilitating the teaching and learning process, increasing the efficiency of teaching and learning, maintaining relevance to learning goals, and helping concentration. Learning media are able to stimulate more than one sense, such as lectures using audio visual aids will be more effective than using only one receptor, such as writing. It is also hoped that the media can touch on the cognitive, affective and psychomotor aspects (Marzano, 2001). In this research, various learning methods have been carried out for the promotion of health education in children. According to Edgar Dale (in Wibowo & Suryani, 2013) if a student only reads the material, they will remember 10%, if they only hear it than they will remember 20%, if they only see it presented than they will remember 30%, but if they listen and see the material than they will remember 50%.

Feelings of pleasure are seen when the students were watching the videos and playing, as well as when they answered the questions correctly, and even if the answer was wrong, they would laugh then listen to the correct answer read by another player. The laughter and joy that occurred during the game is believed to make the subject more physically and psychologically healthier. At a glance laughter looks simple but actually involves a complex physical system of breathing, muscular movement, and cardiovascular circulation. When laughing occurs, there is an increase in oxygen through the blood and a cleansing of the lungs. Relaxation also occurs in the muscles, and the cardiovascular system increases the performance of the heart and blood pressure, which increases the circulation of oxygen to all of the body's cells.

Feeling happy is believed to help the process of receiving information. While Johnson & Proctor (2004) emphasized that negative emotions such as anxiety, sadness and depression will make the learning process disrupted. Furthermore, it was said that negative emotions influence perception, and may negatively impact the encoding of learning material. Medin, Ross, and Markman (2005) added that information would be more easily encoded into memory if the process was emotional. So if the material has meaning or has a special impression of affection, the individual will more easily remember. The learning process in children cannot be equated with adults. Psychologically, children need an atmosphere of playful learning or a situation full of excitement. Therefore, the method employed in this research is an alternative.

Playing is every activity carried out for the pleasure it creates without considering the end result. At present there has been a change in attitude towards playing as a result of scientific studies on what play activities can contribute to children's development. Scientists have shown that play is a valuable learning experience, no longer considered a waste of time. Playing is also an important tool for socialization because playing is an opportunity to connect with other people, especially peers.

When playing, children try their ideas, ask questions, and get answers to their problems. Playing is not just fun, but it provides opportunities for children to develop their emotional, physical, social and reasoning abilities because through games and game tools children learn to understand contextually. This play activity is a dynamic process in which a child obtains information and knowledge which later becomes the basic foundation of his knowledge for the future. Formal learning can be a very tedious process for children to do. Playing is a dynamic process that actually does not inhibit the child's desire for entertainment. A child's ability to remember is sometimes limited due to a lack of interest in certain things. With a pleasant situation and interesting learning media, children's attention will be more easily focused, and then information will be more easily embedded into memory (Sternberg, 2003).

In this study, learning media with videos and a game of snakes and ladders was chosen because it is relatively easy, does not require extensive space, and is very possible to be applied by more than one child so that they can still socialize. The snake-ladder game was chosen because this game is known by almost all Indonesian people from various age groups. One proof is that the snake-ladder game is relatively easy to find in places that sell children's games.

Budianto & Cahyo (2010) stated that the snake-ladder game was originally named "Paramapada Sopanam" (Ladder to Salvation). The snake-ladder game was developed by Hindu religious leaders Gyandev to teach children about appreciation. Snakes represent immoral and bad decisions, while the stairs represent moral and good decisions. This game is also called Mokshpat or Moksha-Patamu. The goal is to give a kind of character lesson that good deeds will get reward while bad deeds are punished. This game entered England in 1892 and in 1943 the name was changed to "Chutes and Ladders" by Milton Bradley in America for commercialization.

According to Novarina, (2010) the snake-ladder game is one of the lightweight recreational toys in Indonesia, in addition to other board games such as monopoly, ludo, dam, and halma. Snakes and ladders are part of traditional games in Indonesia, although there is no complete data on when the game appeared. In the past, many Indonesian children who played snakes and ladders made this game very popular in the community. This game is light, simple, educational, entertaining and very interactive if played together. Everyone can create their own board with a number of boxes, snakes and stairs as desired.

It was observed that students were excited to continue playing the game, even during their break. The researchers also conducted an in-depth analysis of the students' responses after looking at pictures and answering the questions on the cards. This approach was also used in Mulyatik's research

(2009), which studied how the snakes and ladders game influenced the learning of history material. The history material was written on the back of cards in the form of questions, and the students had to ask each other to provide the correct answer

When playing, it is possible to repeat questions because the pieces that fall in the question box can occur more than once. The playing process is not just one time because it is done during school breaks. Reading this question and answer over and over makes information more readily encoded. This is supported by Medin, Ross, and Markman. (2005) who assert that information will be more easily encoded into memory through this process.

The subject's motivation to learn is improved through the videos and games, and the display of games that contain images or photos with attractive colors has succeeded in capturing the child's interest. Students do not feel forced to learn or receive information like in conventional learning methods. Medin, Ross, Markman (2005) stated that one of the factors that determines how people remember is their motivation to learn or receive information. As is the case with Nugrahani's (2007) study, the students' encoding and understanding was influenced by an increase in learning motivation due to attractive learning media. Thus, it can be concluded that the video media and games in this study are effective because students can use them with pleasure. Their positive feelings increased their motivation to learn. Similarly, many things could be more easily remembered due to their positive feelings.

In general, the use of the snakes and ladders games has shown that the design of the game is a simple and effective, can be played at leisure, is familiar, and creates a challenging but enjoyable learning atmosphere. In addition, students learn to accept consequences, namely by receiving the reward of climbing the stairs and the punishment of going down the snake. Thusly, they learn about success and failure, which is useful for them in adapting more contextual skills for mental health and socialization. Students also learn to control themselves in social interactions while playing. Finally, the learning process also becomes easier because students immediately get feedback through the correct answers mentioned by other players.

Through observation in the field, this game can also provide wider benefits to students such as: (1) knowing defeat and winning; (2) learn to work together and wait their turn; (3) learning to solve problems, and (4) stimulating cognitive, language, and social aspects.

4. CONCLUSION

The Based on the results of the above analysis, it can be concluded that the two methods, both watching animated videos and the snakes and ladders game, can increase knowledge about sexuality in SD Sidan Gianyar students. Playing is a dynamic process which supports children's learning process. While children's ability to remember is sometimes limited due to a lack of interest, under a pleasant situation and interesting learning media, children's attention

will be more easily focused and, therefore, information will be more easily embedded into memory.

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