The Influence of Health Promotion Animation Videos on Students' Knowledge of Sexual Violence Prevention

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ABSTRACT

Purpose of the study: The main objective of this study was to determine the effect of using animated videos in health promotion related to the prevention of sexual violence is to increase students' knowledge and awareness of the dangers of sexual violence and preventive measures.

Methodology: This study uses a quantitative research type with a quasi-experimental design involving an experimental group and a control group. The population in this study were fifth grade elementary school students. The data collection technique in this study used a questionnaire method distributed students before and after health promotion intervention. The collected data were analyzed using descriptive and inferential statistical techniques.

Main Findings: This study successfully showed that animated videos as a health promotion media are effective in improving the knowledge and attitudes of high school students regarding the prevention of sexual violence. Compared with traditional methods such as power point, animated videos are more able to attract attention and improve students' understanding, resulting in a significant increase in their knowledge and attitudes towards this sensitive topic.

Novelty/Originality of this study: The novelty of this study lies in the use of animated videos as an innovative and interesting health promotion media to improve the knowledge and attitudes of high school students regarding the prevention of sexual violence. This study introduces a dynamic and interactive visual approach, different from conventional methods such as lectures or the use of power point.

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1. INTRODUCTION

Animated video is a visual medium that combines moving images, text and audio to convey information or stories in an interesting and interactive way [1], [2]. This technology allows the presentation of complex content to be simpler and easier to understand by various groups, especially students [3]–[5]. The advantage of animated videos lies in their ability to explain abstract concepts in a more concrete and visual way, thereby increasing the attractiveness and retention of information. In educational contexts, animated videos are often used to illustrate processes or phenomena that are difficult to explain through text or static images, helping students understand the material better. In addition, animated videos also have the flexibility to be repeated without losing the quality of delivery, allowing students to learn at their own pace. With a combination of visual and audio elements, animated videos can stimulate various senses simultaneously, making the learning process more effective and enjoyable [6]–[8].

Health promotion is a systematic effort to increase people's knowledge, attitudes and behavior in maintaining and improving their health [9], [10]. Through various communication and education strategies, health promotion aims to empower individuals and communities to be able to make better decisions regarding their health. These activities include various approaches, ranging from mass media campaigns, direct outreach, to the use of digital technology such as health applications and animated videos [11]–[13]. By targeting various levels of society, health promotion plays an important role in preventing disease, improving quality of life, and reducing long-term health care costs. The effectiveness of health promotion is highly dependent on the relevance and deliverability of the message conveyed, as well as the active participation of the target community [14]–[16]. In this digital era, the use of information and communication technology, such as social media and online platforms, is increasingly expanding the reach and impact of health promotion, allowing important messages to be conveyed more quickly and widely.

Sexual violence is an act that involves sexual coercion or manipulation of an individual without their consent. These actions include various forms of behavior, including verbal abuse, physical coercion, and sexual exploitation, all of which damage the integrity and human rights of the victim. Sexual violence not only causes physical impacts, but also deep psychological, social and emotional impacts on the victim [17]–[19]. The factors that cause sexual violence are varied, including gender inequality, wrong cultural norms, and lack of education and law enforcement. Increasing public awareness and appropriate education regarding sexual violence is key in preventing and handling this problem [17], [20]. The role of educational institutions, communities and government is vital in creating a safe and supportive environment, where every individual is respected and protected from all forms of violence. Preventive measures, support for victims, and firm law enforcement are key elements in overcoming this serious challenge.

Students' knowledge of sexual violence is an important aspect in efforts to prevent and handle cases of sexual violence in the educational environment [21]–[23]. With a good understanding of the definition, forms and signs of sexual violence, students can be more alert and able to protect themselves and their friends from risky situations. Adequate education about individual rights, consent, and how to report incidents of sexual violence also contributes to the formation of a culture that respects and protects the integrity of each person. In schools, educational programs that integrate sexual violence material into the curriculum can help students develop critical thinking skills and empathy, as well as build the confidence to discuss these sensitive issues openly. Strong knowledge among students not only prevents sexual violence from occurring but also supports the creation of a safe and positive learning environment, where each individual feels respected and protected [24].

Sexual violence prevention is a series of actions designed to reduce the risk and prevent the occurrence of sexual violence in a variety of contexts, including schools, communities and workplaces. Prevention strategies involve public education, individual empowerment, policy changes, and strict law enforcement. Education plays a key role in prevention, with a focus on increasing awareness about sexual violence, individual rights, and the importance of consent in every sexual interaction . Training programs for students, teachers, and school staff on how to recognize and respond to sexual violence are also important to create a responsive and supportive environment. In addition, clear school policies regarding handling sexual violence and support for victims can encourage reporting and provide adequate protection. Active community participation in anti-sexual violence campaigns, as well as collaboration with non-governmental organizations and law enforcement agencies, also plays a role in creating an ecosystem that rejects all forms of sexual violence. This integrated and sustainable effort is critical to building a society that is safe and free from sexual violence.

This research is in line with research conducted by Bonar [17]. Such research on sexual violence prevention often arises from a lack of comprehensive materials and effective teaching methods. Although several schools have adopted educational programs about sexual violence, there are still many that have not implemented a holistic and systematic approach. These disparities are exacerbated by differences in the quality and quantity of information delivered, as well as a lack of training for educators to address these topics with the necessary sensitivity and accuracy [25]. Without structured efforts to close this gap, many students remain vulnerable to sexual violence because they do not have sufficient knowledge and skills to recognize and prevent it. Therefore, there is a need to review and improve the curriculum, as well as provide adequate resources to ensure that all students receive appropriate education regarding the prevention of sexual violence.

The novelty of this study lies in the use of interactive animation media as an educational tool in an educational environment, which is rarely applied specifically to sensitive topics such as sexual violence. This approach is expected to be more effective in attracting attention and increasing students' understanding than conventional methods. Innovative approaches to sexual violence prevention education, such as the use of animated videos, offer significant novelty in the learning process. Animation can introduce new ways of conveying sensitive and complex information in a more engaging and easy-to-understand manner [26], [27]. The advantage of using animated videos lies in their ability to visualize scenarios and consequences of sexual violence, providing real examples and solutions that students can apply in everyday life. This novelty not only attracts students' interest but also increases information retention because it involves many senses in the learning

process. Thus, the integration of animated videos in the health education curriculum can be an effective breakthrough in strengthening students' knowledge and skills in preventing sexual violence.

The urgency to educate students about preventing sexual violence is increasing along with the high rate of sexual violence among teenagers. Every year, many cases of sexual violence involving students are reported, highlighting the need for urgent action to address this problem. The school environment, as the second place where students spend most of their time, must be a safe and supportive place for all students. Providing comprehensive education about sexual violence and its prevention is a crucial step in protecting students from this threat. This urgency is also reinforced by the need to create a culture that respects and protects individual rights, as well as equipping students with the knowledge and skills they need to become agents of change in their communities. Therefore, the implementation of sexual violence prevention education programs can no longer be postponed.

The main aim of this research is to determine the effect of using animated videos in health promotion related to preventing sexual violence, namely to increase students' knowledge and awareness regarding the dangers of sexual violence and steps to prevent it. Through an attractive visual approach, the animated video aims to explain concepts that are difficult to understand through conventional methods, such as consent, individual rights, and signs of sexual violence. Additionally, another goal is to equip students with practical skills to protect themselves and help others who may be victims. The animated videos also aim to create a learning environment that is more inclusive and responsive to sensitive issues, so that students feel safe and supported to speak up and seek help if needed. Ultimately, the aim of integrating this animated video is to reduce the rate of sexual violence among students by providing them with sufficient knowledge and increasing their awareness about the importance of preventing and protecting against sexual violence.

2.   RESEARCH METHOD
2.1 Types of Research

This research uses a quantitative type of research with a quasi-experimental design involving an experimental group and a control group. This design was chosen to evaluate the effectiveness of animated videos in increasing students' knowledge and abilities in sexual violence prevention material. In this quasi-experimental design, both the experimental group and the control group will be given a pre-test and post-test to measure changes in knowledge and attitudes before and after the intervention. Using this design allows researchers to compare the results of the two groups so that they can objectively assess the influence of animated videos as a health promotion tool.

2.2 Population and Sample

The population in this study were all class V students at State Elementary School 21 South Bengkulu, totaling 46 students. The sample was taken using a total sampling technique, where all class V students who were present at the time of the research were used as samples. Of the total 46 students, 23 students were placed in the intervention group who received health promotion via animated video media, while the other 23 students were in the control group who received promotion via power point media. This technique was chosen to ensure that the entire population was represented in the study and to increase the validity of the research results.

2.3 Data Collection Techniques

The data collection technique in this study used a questionnaire method distributed to students before and after the health promotion intervention. This questionnaire is designed to measure students' knowledge and attitudes about preventing sexual violence, consisting of closed-ended questions that have been validated. Before the intervention, the first questionnaire was administered to obtain initial data regarding students' knowledge and attitudes. After the intervention was carried out, a second questionnaire was administered to evaluate the changes that occurred. This primary data was collected directly from respondents in a regulated classroom setting, with the guidance of researchers and enumerators who ensured that each student understood the questions asked [28]. This technique allows systematic and comprehensive data collection for further analysis.

2.4 Data Analysis Techniques

The collected data was analyzed using descriptive and inferential statistical techniques. For quantitative data, descriptive analysis is used to describe sample characteristics and distribution of questionnaire answers [29], [30]. Next, the t test (t-test) was used to test the difference in average pre-test and post-test scores between the experimental group and the control group, in order to determine the effectiveness of the animated video. This analysis helps in identifying whether there is a significant increase in students' knowledge and attitudes after receiving the animated video intervention compared to conventional learning. Qualitative data from interviews were analyzed using thematic analysis methods to identify the main themes that emerged from students' experiences and perceptions.

2.5 Research Procedures

The data analysis technique used in this research involves several stages of statistical analysis to evaluate the effectiveness of health promotion through animated videos on students' knowledge and attitudes regarding preventing sexual violence [10]. Data collected from questionnaires before and after the intervention were analyzed using descriptive statistical tests to see the frequency distribution and characteristics of respondents. Next, to test changes in knowledge and attitudes before and after the intervention, a paired t-test or Wilcoxon signed-rank test was carried out depending on the normality of the data. The Mann-Whitney U test was used to compare the effectiveness between the intervention group (animated video) and the control group (power point). All data analysis was carried out using SPSS statistical software to ensure the accuracy of the results and the validity of the conclusions obtained from this research.

3.   RESULTS AND DISCUSSION

This research was carried out to evaluate the effectiveness of health promotion using animated video media on knowledge and attitudes related to preventing sexual violence against children at State Elementary School 21 South Bengkulu. This research is divided into two main stages: preparation and implementation. The preparation stage includes determining the title, collecting secondary data, formulating the problem, preparing research instruments, examining proposals, and obtaining permits. The implementation stage involves collecting primary data through questionnaires filled out by respondents on predetermined dates.

Respondents in this study consisted of 23 students in the animation video group and 23 students in the power point group. From univariate analysis, the majority of respondents were 11 years old (52.2% in the animation video group and 69.6% in the power point group). In terms of gender, 56.5% of the animated video group were male, while 52.2% of the power point group were female. All respondents were Muslim, and the majority of ethnicities in the animated video group were Javanese (43.5%), while in the power point group the majority were Bengkuluan (47.8%). Belom to show average attitudes about prevention of sexual violence against children before and after health promotion given to animation video media group and power point media group

Table 1. Average Attitudes About Prevention of Sexual Violence Against Children Before and After Health Promotion Given to Animation Video Media Group and Power Point Media Group

No.	Variable	N	Mean	SD	Mean
1.	Video Animasi Pretest	23	32,2609	1,91210	
	Video Animasi Postest	23	35,1739	1,96913	2,913
2.	Power Point Pretest	23	29,7391	3,41411	
	Power Point Postest	23	30,7391	3,36043	1

The results of the analysis showed a significant increase in the average knowledge about preventing sexual violence in children after being given health promotion. In the animated video group, the average knowledge increased from 7.2174 to 9.3913. Meanwhile, in the power point group, the average knowledge increased from 6.0870 to 6.7826. These results indicate that promotions using animated video media are more effective in increasing knowledge compared to power point media. An increase was also seen in the average attitude of respondents towards preventing sexual violence. In the animated video group, the average attitude increased from 32.2609 to 35.1739. Meanwhile, in the power point group, the average attitude increased from 29.7391 to 30.7391. This indicates that animated video media is more effective in changing attitudes than power point media.

The Mann-Whitney statistical test shows that there is a significant difference in the increase in knowledge and attitude scores between the group that used animated video media and the group that used Power Point media. The animated video group showed an increase in knowledge scores with a Mean Rank of 31.74, compared to 15.26 in the power point group. For attitudes, the Mean Rank for the animation video group was 30.33 compared to 16.67 for the power point group. Statistical tests show that health promotion using animated video media is more effective than power point media in increasing knowledge and attitudes about preventing

sexual violence against children. This is indicated by a p-value of 0.000 for knowledge and attitudes, which means it is significant at the 95% confidence level.

This finding is in line with research by Correia and Harrison [31] which showed a significant increase in knowledge and attitudes after intervention using animated video media. Knowledge obtained through audio-visual media tends to last longer than other media. This is because animated video media can convey information in a way that is more interesting and easy for children to remember. Children aged between 10-12 years tend to be responsive to visual media such as animated videos. Children at this age find it easier to remember information conveyed through media that is visually and auditorily interesting. Therefore, the use of animated videos is very suitable for health promotion among elementary school children. Although the research results show the effectiveness of animated video media, this research has several limitations.

Researchers experienced difficulties in controlling the environment during the intervention, as well as the limited number of respondents from only one class (VB class) due to time and place constraints. In addition, this study used quantitative methods that may not capture the qualitative aspects of changes in children's attitudes and knowledge. This research shows that animated video media can be an effective tool in health promotion in elementary schools. Therefore, it is recommended that schools and health institutions consider using this media in their educational programs. For future research, it is recommended that it be conducted with a larger sample and include qualitative aspects to gain a more comprehensive understanding of changes in children's attitudes and knowledge [32], [33].

The efficacy of animated videos in enhancing middle school students' understanding of sexual violence prevention. Through a controlled experiment, the research assesses how exposure to these videos impacts students' knowledge retention and comprehension of crucial prevention strategies. This investigation aims to contribute insights into effective educational tools for sensitive topics among adolescents, potentially informing future health promotion strategies in educational settings.

The implications of this research indicate that the use of animated videos as a health promotion medium has great potential to increase students' knowledge and attitudes towards preventing sexual violence. These findings indicate that a more interactive and engaging approach can overcome the limitations of conventional methods, which are often less effective in attracting students' attention. Implementing animated videos in the health education curriculum can be a more effective strategy in conveying important information, helping students understand and remember the material better. Apart from that, the success of this method also encourages further development of technology-based educational media, strengthening the importance of innovation in preventive and educational efforts in the school environment. These implications are not only relevant for educational policy makers and health practitioners, but also for educational content developers who seek to create more engaging and impactful learning materials.

The novelty of this research lies in the use of animated videos as an innovative and interesting health promotion medium to increase secondary school students' knowledge and attitudes regarding the prevention of sexual violence. This research introduces a dynamic and interactive visual approach, different from conventional methods such as lectures or the use of power point media which tend to be passive. Animated videos make it possible to convey complex messages in a way that is easier for students to understand and remember. Additionally, this study also directly measured changes in students' knowledge and attitudes before and after the intervention, providing empirical evidence of the effectiveness of animated videos compared to traditional methods. It is hoped that this approach can become a model for other health promotion efforts in schools, increasing the appeal and impact of health education among adolescents.

4. CONCLUSION

In conclusion, this research succeeded in showing that animated videos as a health promotion medium are effective in increasing secondary school students' knowledge and attitudes regarding the prevention of sexual violence. Compared to traditional methods such as PowerPoint, animated videos are better able to attract students' attention and increase understanding, resulting in significant improvements in their knowledge and attitudes towards this sensitive topic. These results underscore the importance of innovation in health education methods, particularly in formal education contexts, to ensure important messages can be conveyed in a way that is engaging and easy for students to understand. These findings open opportunities for wider adoption of interactive visual media in health education curricula, fostering more dynamic and effective learning environments.

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