



## THE EFFECT OF SPINNING WHEEL ON ADOLESCENT KNOWLEDGE AND ATTITUDES ABOUT PRE-MARITAL SEX IN BENGKULU CITY

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### Abstract

**Background:** Adolescence is a period filled with curiosity about everything, including one sexual problem. Adolescents require sexual education instruction at this time in their personal development.

**Objective:** The purpose of this study is to see how teaching using the Spinning Wheel affects adolescents' knowledge and attitudes toward premarital sex at SMA Negeri 10 in Bengkulu City.

**Method:** This study employs a pre-experimental design with single-group pretest and posttest techniques. Proportionate stratified random sampling was performed with 40 class 10 students from SMA Negeri 10 Bengkulu City, and pre and post-questionnaires were employed for data collection. The analytical method uses the Wilcoxon test.

**Result:** The results showed that there was an increase in the average knowledge of adolescents before (10.50) and after education (13.70) with a mean difference (3.2), an increase in the average attitude before (33.65) and after being given education (38.48) with a mean difference (4.83). There is an educational influence through the media Spinning Wheel On The increase in knowledge ( $P\text{-Value}=0,000$ ) and attitudes ( $P\text{-Value}=0,000$ ) of adolescents about premarital sex at SMA Negeri 10 Bengkulu City.

**Conclusion:** There is an educational influence using Spinning Wheel media on teenagers' knowledge and attitudes about premarital sex. It is hoped that academics, educational institutions, and other researchers will use the Spinning Wheel media and develop android-based learning methods and other games to increase the knowledge and attitudes of adolescents, especially about premarital sex.

**Keyword :** Teenagers, Premarital Sex, Spinning Wheel

### INTRODUCTION

World Health Organization (WHO) in 2018 the highest number of young girls aged <15 years who had sexual intercourse in the world occurred in Bangladesh, which was 60%, while in the Asian region, especially Indonesia, was ranked 4th with teenage girls who had had sexual intercourse by 20%. Data from the 2017 Indonesian Demographic and Health Survey (IDHS) recorded that among women and men who had had sexual intercourse before marriage, 59% (adolescent girls) and 74% (adolescent boys) reported starting sexual intercourse for the first time at the age of 15-19 years.<sup>1</sup>

Data from Basic Health Research (Riskesdas) 2018, in Indonesia there are 4.5% of male youth and 0.7% of female adolescents aged 15-19 who admit to having had sexual intercourse. The results of the Province National Population and Family Planning Agency (BKKBN) 2020 survey conducted by the Bengkulu found that

3.1% of Bengkulu adolescents had had sex with their girlfriends before marriage, as many as 5.1% were teenage boys and 1% were teenage girls.<sup>2</sup>

Premarital sex is an act performed by two people before marriage as a response to sexual urges manifests as the entry of the penis into the vagina, as well as penetration into the mouth (oral sex), or into the anus (anal sex). The impact of premarital sexual behavior is enormous both physically, psychologically, and biologically. The psychological impact of adolescents will experience psychological trauma such as depression, low self-esteem, guilt, loss of hope, and so on, the physical impact is that it can cause unwanted pregnancies for teenage girls and end in abortion.<sup>3</sup>

Premarital sexual behavior can occur due to a lack of knowledge and attitudes toward premarital sex. With the knowledge of

adolescents who do not know about premarital sex behavior, This can make them misbehave, causing them to engage in sexual behavior. In addition to these influencing factors, it can also be caused by adolescents having the perception that sex is a way of expressing love so that for the sake of love, a person gives up sexual relations with a girlfriend before marriage.<sup>4</sup> Insufficient knowledge about sex causes problems in teenagers that they don't want at all, for example, teenage pregnancy, premature birth, birth defects in the fetus, abortion, interruption of school, marriage at a young age, divorce, and venereal disease, which are more dangerous for teenagers who do not know the consequences of sexual relations, namely Sexually transmitted diseases including HIV and AIDS, for which there is currently no cure.<sup>5</sup>

In addition, one of the main driving factors for premarital sex behavior in adolescents is their negative attitude, another thing that is also said to have a role in carrying out premarital sex behavior is a positive attitude towards premarital sex behavior itself.<sup>6</sup> Adolescents have a positive attitude but initiate premarital sex because there is a gap between what is thought and reality. Where teenagers understand what is good for themselves. However, they were unable to implement it. This is due to other factors such as a permissive living environment that allows teenagers to initiate premarital sex, the negative influence of peers which triggers teenagers' curiosity about premarital sex, low religiousness, and other factors.<sup>7</sup> Adolescents who have a liberal attitude towards sexuality can be influenced by internet media. Adolescents are more likely to express problems related to their sexuality through discussions with friends.<sup>8</sup>

Efforts to prevent and increase the knowledge and attitudes of adolescents about premarital sex require learning media that are appropriate to the target. Learning media can be made and designed according to current technological developments.<sup>9</sup> In the current era of

technological and information development games are very popular among students.<sup>10</sup> One of the learning media that is effective, interesting, and easy to understand for the learning process is the media Spinning Wheel.<sup>11</sup>

Spinning Wheel is a circular game using the website in which there is education. Spinning Wheel is a wheel spinner to help decide upon making a random choice. Whether you need a lucky wheel, a random number generator, a wheel of names, a raffle generator, a wheel spinner for games or a simple yes or no wheel - Spin the Wheel has it covered.<sup>11</sup> This virtual wheel simulator is the first of its kind to let you create multiple custom-designed spinner wheels to use either independently or at the same time. This opens up a huge range of possibilities.<sup>12</sup> The spinning wheel makes games fun and peaceful when played or used as learning media.<sup>11</sup> Method education spinning wheel can be given to students to increase sexual education knowledge as an effort to prevent sexual violence in adolescents.<sup>13</sup>

The results of Education & Muhammadiyah's research, can be determined that Spinning Wheel can improve students' writing procedural text skills. The result is Spinning Wheel can be used as a game that can help students learn to write. Spinning Wheel can increase students' interest, challenge their thinking and enable them to learn, easy to play anytime and anywhere using the web. The results of Saputra and Juliana's research show that there is a significant effect of sexual education methods the spinning wheel on the knowledge of students.

Data results from the Bengkulu Province Education and Culture Office in 2021, there are 27 High Schools (SMA) in Bengkulu City, there are 3 High Schools with the highest dropout rate, namely SMA N 10 as many as 37 students, SMA Negeri 1 as many as 21 students, and SMA Muhammadiyah 4 as many as 18 students, which in this case dropping out of school is closely related to the incidence of premarital sex in adolescents.

Based on an interview with an employee of the Bengkulu Province Education and Culture Office, one of the reasons for dropping out of school was due to having premarital sexual relations and pregnancies outside of marriage.

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The results of an initial survey at SMA N 10 Bengkulu City on Thursday, January 26 2023 by conducting questions and answers to grade 10 students regarding the concept of premarital sex, found two students saying that premarital sex is intimate relations carried out outside of marriage, three people said that premarital sex is a prohibited relationship, five students do not know the physical impact of premarital sex, as well based on a statement from one of the Counseling Guidance (BK) teachers stated that in 2022 there would be 1 student expelled for having premarital sexual intercourse and 1 female student expelled due to pregnancy out of wedlock, therefore researchers were interested and chose SMA Negeri 10 Bengkulu City as the place of research on "The Influence of Education Through the Media Spinning Wheel Towards Increasing Adolescents' Knowledge and Attitudes About Premarital Sex at SMA N 10 Bengkulu City".

## **METHODS**

A pre-experimental design was employed in this study, using one group pretest and posttest techniques. Proportionate stratified random sampling was performed with 40 class 10 students from SMA Negeri 10 Bengkulu City, and before and post-questionnaires were employed for data collection. The analytical method uses the Wilcoxon Test to determine the effect of education through the Spinning Wheel on Increasing Knowledge and Attitudes of Adolescents About Premarital Sex at SMA Negeri 10 Bengkulu City. The research was carried out after obtaining proper ethical approval No.KEPK.BKL/23.

### **How To Use The Spinning Wheel**

1. Before starting the game, players must prepare a laptop or cellphone to start this game via the web and also prepare a pen to write questions and answer questions that are obtained after The game is played.
2. Students are asked to form small groups with group members totaling 5 people consisting of men and women.
3. Opens the google chrome page and then Type a link to enter the Spinning Wheel web; [spinnerwheel.com](https://spinnerwheel.com)  
<https://spinnerwheel.com/wheels/Y9H7r0jc8U5LQwKEJizZ>
4. Players must determine which group's turn the question will be played on *Spinning Wheel*.
5. Each group must rotate *Spinning Wheel* to get questions.
6. The group representative must see where the needle stops to know what question is being asked.
7. Each group must write the questions they get and answer the questions on a piece of paper containing the group number and group members.
8. If a question has been selected by the previous group, then the question is removed from the list of questions that will be played by another group. So, each group gets different questions.
9. When all groups have received questions, the group discussion session continues, and then the group representatives present the results of the discussion.
10. After playing, the researcher explains the correct answers to the questions and provides education about premarital sex that is in accordance with the theory naturally.



Figure 1. Before spin is turn Figure



Figure 2. Process to spin

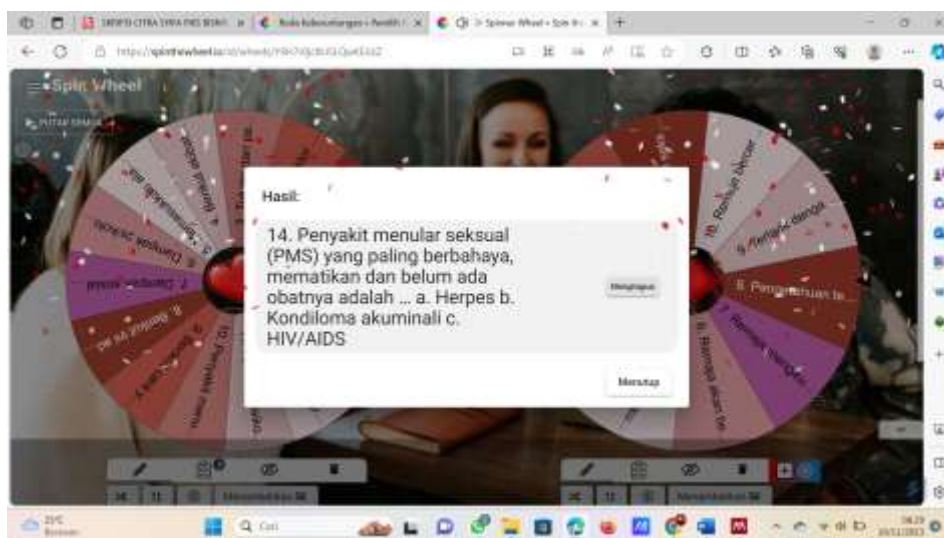


Figure 3. After Spin is turn

**RESULT****Tabel 4.1 Frequency Distribution of Respondent Characteristics at SMA Negeri 10 Bengkulu City**

| Respondent Characteristics |                  |    |      |
|----------------------------|------------------|----|------|
| No.                        | Variable         | N  | %    |
| 1                          | Respondent's Age |    |      |
|                            | 14 Years         | 1  | 2,5  |
|                            | 15 Years         | 9  | 22,5 |
|                            | 16 Years         | 24 | 60   |
|                            | 17 Years         | 6  | 15   |
|                            | Total            | 40 | 100  |
| 2                          | Gender           |    |      |
|                            | Male             | 21 | 52,5 |
|                            | Female           | 19 | 47,5 |
|                            | Total            | 40 | 100  |

Based on Table 4.1, it was found that out of 40 respondents based on age, the majority (60%)

were 16 years old. In terms of gender, most (52.5%) of respondents were male.

**Table 4.2 Average increase in knowledge and attitudes before and after being given education through the media Spinning Wheel.**

| Variable         | N  | Mean  | $\Delta\bar{x}$ | SD    | Min | Max |
|------------------|----|-------|-----------------|-------|-----|-----|
| <b>Knowledge</b> |    |       |                 |       |     |     |
| -Before          | 40 | 10,50 | 3,2             | 2,944 | 4   | 14  |
| -After           | 40 | 13,70 |                 | 2,174 | 8   | 15  |
| <b>Attitude</b>  |    |       |                 |       |     |     |
| -Before          | 40 | 33,65 | 4,83            | 3,913 | 22  | 38  |
| -After           | 40 | 38,48 |                 | 3,030 | 30  | 40  |

Based on table 4.2, before receiving instruction through the medium Spinning Wheel, the average knowledge attained was (10.50), after being given education it increased to (13.70) with an average increase of (3.2). The average

attitude score before being given education was (33.65), after being given education it increased to (38.48) with an average average increase (4.83).

**Table 4.3 The Effect of Education Through the Media Spinning Wheel On Increasing Knowledge and Attitudes of Adolescents About Premarital Sex before and after it is given Education**

| Variable         | Mean  | Mean Rank | P-Value |
|------------------|-------|-----------|---------|
| <b>Knowledge</b> |       |           |         |
| -Before          | 10,50 | 0.00      | 0.000   |
| -After           | 13,70 | 20.50     |         |
| <b>Attitude</b>  |       |           |         |
| -Before          | 33,65 | 0.00      | 0.000   |
| -After           | 38,48 | 20.50     |         |

According to Table 4.3, the Wilcoxon test on knowledge achieved P-Value =  $0.000 < 0.05$ , indicating that the media Spinning Wheel has an impact on raising adolescent awareness about premarital sex at SMA Negeri 10 Bengkulu City. At attitude P-Value =  $0,000 < 0,05$ , this indicates that the media Spinning Wheel affects promoting teenage attitudes about premarital sex at SMA Negeri 10 Bengkulu City.

## DISCUSSION

### Characteristics of Respondents

The results of the frequency distribution of the characteristics of the respondents amounted to 40 respondents with most of the respondents aged 16 years. In this study, adolescents aged 14-17 years were taken. According to research by Entjaurau et al, adolescents at this age are considered a group at risk for engaging in sexual behavior because their great curiosity and liking to try something new is the hallmark of a teenager. If this is not balanced with knowledge of reproductive health with sexual education, it can have very unwanted impacts that can have an impact on the future of these adolescents.<sup>14</sup> The age of 16-year-old adolescents is a period of transition, a period of physical, emotional, and sexual changes that increase adolescent curiosity about various things.<sup>15</sup>

The characteristics of respondents are mostly male. Fabiana's research that there is a significant relationship between gender and adolescent sexual behavior (p-value  $< 0.05$ ). Adolescent boys have the opportunity to engage in premarital sex 1,276 times compared to female adolescents (CI = 95% = 1,240 – 1,717).<sup>16</sup>

### Average Increase in Adolescents' Knowledge and Attitudes About Premarital Sex before and after education

Based on the results of the study, there was an increase in the average knowledge before (10.50) and after being given education (13.70) with a different mean (3.2) in line with Saputra and Juliana's research, the average before being given method education spinning wheel is 69.18, the student's minimum score is 48 and the student's maximum score is 88, the standard deviation is 11.063. Ninety five percent Yield confidence interval between 65.82 to 72.55. Once given the sexual education methods

spinning wheel average student knowledge about sexuality is 81.98, the minimum student score is 58 and the maximum is 98; the standard deviation is 10.022, Resulting 95% confidence interval between 78.93 to 85.02. The data illustrates that there is an increase in student's knowledge after being given sexual education methods the spinning wheel.<sup>13</sup> Research by Edi and Taufik that there was an increase in the knowledge of research respondents from the pretest and posttest. At the pretest data, the mean value of knowledge was 23.28 and after the posttest, the mean value was 28.16.<sup>17</sup>

The results of the study used a knowledge questionnaire consisting of 15 knowledge questions. Of the 15 knowledge questions, the respondent's score before being given education was still low on question 7 about the social impact of premarital sex, however, after education, the score climbed, and there was a difference in average knowledge before and after the respondents were educated via the media Spinning Wheel.

The increase in the average attitude score before (33.65) and after education (38.48) with a mean difference (4.83) is in line with the research of Edi and Taufik (2019), that there was an increase in the attitudes of research respondents from pretest and posttest. During the pretest, the mean value of the attitude pretest results was 34.33 while after the posttest the mean value became 66.64. According to the findings of Risna R, Usman, et al. the results of the study showed that the pretest average value was 60.67 after being given the treatment or post-test, the results of changes in attitude increased and the average value was 109.47 using snakes and ladders media.<sup>18</sup>

Of the 10 attitude statements, the respondent's attitude score before being given education is still low on question number 3 regarding extracurricular activities can avoid premarital sex behavior, respondents do not know that participating in extracurricular activities can avoid premarital sexual behavior because they think extracurriculars are only for fun and hobbies, but after being given education the score increased and overall there was a difference in the average attitude before and after schooling via the media Spinning Wheel.

### The Effect of Education Through the Media Spinning Wheel On Increasing Knowledge and Attitudes of Adolescents About

### **Premarital Sex before and after it is given Education**

Using a test, do an analysis Wilcoxon Rank Test was signed by Mean Rank knowledge and attitude before (0.00) and after (20.50), the difference in mean knowledge (3.2) and difference in mean attitude (4.83) with P-Value =  $0.000 < 0.05$ , indicating that there is an impact of media education. Spinning Wheel on enhancing teenagers' understanding and attitudes against premarital sex at SMA Negeri 10 Bengkulu City.

The findings of this study are consistent with Saputra and Juliana's research, which indicates that education is a technique of spinning the wheel of influence to enhance understanding about sexual education as part of attempts to prevent sexual assault in teenagers.<sup>13</sup> The results of Edi and Taufik's research, acquired a p-value of  $0.000 < 0.05$ , indicating that snakes and ladders games are successful in increasing students' knowledge and attitudes. According to the findings of this study, excellent levels of sexual knowledge and attitudes are components and outcomes of conduct.<sup>17</sup>

This research is in line with Rahayu's research, that there are significant differences in knowledge and attitudes before and after being given education with audio-visual media with a p-value of  $0.000 < 0.05$ . So it can be said that there is an influence of education about adolescent reproductive health on knowledge and attitudes toward premarital sexuality.<sup>19</sup>

This is consistent with Dwi's research, which found that snakes and ladders media education impacts the amount of youth education addressing measures to avoid premarital sexual behavior. The statistical tests revealed differences in the average level of knowledge in the treatment group following the intervention, albeit the control group also increased on average but at a lesser rate than the experimental group. This is because the respondents were excited when the intervention was carried out, and they were much more enthusiastic throughout the conversation.<sup>20</sup>

According to Notoatmojo, absorption of material and memory of health promotion materials depend on the five senses that are targeted in health promotion. Posters and leaflets have a material absorption capacity of 83% with a memory of 30%, slide exposure has a material absorption capacity of 94%. % with

a memory of 50%, while games that are combination methods have material absorption of 96% with material memory reaching 90%. This is in line with Bafadal's research, stating The Spinning Wheel Game is a teaching approach that incorporates all pupils, making them more active, and interested, and enhancing and enjoying the learning process. As a result, the writers employ spinning Wheel Games in their teaching and learning. Spinning wheel games may be played anywhere and at any time by using the internet, which is more convenient and does not require much time, effort, or space.<sup>10</sup>

Education through the media has a Spinning Wheel impact on raising teenagers' knowledge and attitudes around premarital sex in SMA Negeri 10 Bengkulu City. Thus, initial hypothesis was not rejected, indicating that education through the media Spinning Wheel had an impact on enhancing teenagers knowledge and attitudes regarding premarital sex at SMA.

### **CONCLUSION**

Spinning Wheel media can increase the knowledge and attitudes of adolescents about premarital sex, so that educational institutions can use this media in learning methods so that students can be more active in discussing and discussing, adding creativity and innovation such as using media games based on Android or other educational media to increase knowledge and attitudes of adolescents in providing information, especially knowledge about premarital sex to adolescents. For other Researchers, it is recommended to be able to develop this research further by developing methods and media that have been innovated based on Android or Games as well as adding different variables such as premarital sex prevention behavior with a larger number of samples so that it is more accurate. It is recommended to be able to develop this research further by developing methods and media that have been innovated based on Android or Games others as well as adding different variables such as premarital sex prevention behavior with a larger number of samples so that it is more accurate.

### **RECOMMENDATION**

It is hoped that academics, educational institutions, and other researchers will use the

Spinning Wheel media and develop android-based learning methods and other games to increase the knowledge and attitudes of adolescents, especially about premarital sex.

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