

MODIFICATION OF ROPITA (ROUND SPIN TABLE) EDUCATION MODEL AS AN EFFORT TO IMPROVE BEHAVIOR IN MAINTAINING DENTAL HEALTH IN STUDENTS AT SDN SENDANGMULYO 01, SEMARANG

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ABSTRACT

Background: Dental caries is a multifactorial disease that demineralises dental hard tissues. One of the factors that cause caries is dental hygiene behaviour. The proportion of dental caries in students at SDN 01 Sendangmulyo, Semarang was 80% and the average debris index score was 2,2 with a poor category. Efforts to overcome this problem through modification of the ROPITA (Round Spin Table) education model provide education through game methods so that the learning process is fun and interesting. **Objective:** To produce a modification of the ROPITA (Round Spin Table) educational model that is feasible and effective in its application as an effort to improve behaviour in maintaining dental health in students at SDN Sendangmulyo 01, Semarang. **Methods:** Research and Development with true experiment research design (pretest-postest with control group design). The sample totalled 60 respondents including 30 intervention group respondents and 30 control group respondents. Model test data using paired t-test and independent t-test. **Results:** Expert validation test of the modified ROPITA (Round Spin Table) educational model obtained interclass correlation coefficient with a p-value of 0,001. The results of the independent t-test data effectiveness test of knowledge, attitudes, actions and debris index score obtained a p-value of 0,000 < 0,05. **Conclusion:** Modification of the ROPITA (Round Spin Table) educational model is feasible and its application is effective as an effort to improve behaviour in maintaining dental health in students at SDN 01 Sendangmulyo, Semarang compared to the control group.

INTRODUCTION

Background

The development of a healthy Indonesia aims to increase awareness, willingness, and ability to achieve optimal health status. Dental health can affect quality of life due to the beginning of the process of digestion of food through the teeth. Teeth function to chew, speak and maintain the shape of the face, so it is important to maintain it early on so that it lasts a long time in the oral cavity. A healthy dental health condition that is functioning properly, free from pain in the teeth and their supporting tissues (Kemenkes RI, 2020),(Suanda, 2018).

According to the World Health Organization (WHO), an estimated 3.58 billion people worldwide suffer from caries in permanent teeth, and more than 530 million children suffer from caries in deciduous teeth (WHO & The World Bank, 2017). According to Riskesdas, dental and oral health problems in Indonesia have continued to increase over the past 11 years, with prevalence of 23.2%, 25.9%, and 57.6% respectively in 2007, 2013, and 2018. The largest prevalence of dental health problems in 2018 in Indonesia was dental caries reaching 45.3% and brushing teeth properly was only 2.8%. The prevalence of dental health problems was highest at the age of 5 to 9 years at 67.3% and 14.6% were treated by health professionals (Badan Penelitian dan Pengembangan Kesehatan, 2018).

Based on a preliminary study conducted by researchers at SDN Sendangmulyo 01, Semarang obtained a percentage of dental caries of 80% and an average debris index of 2.2 (87%) in the bad category. This percentage is caused by behavior that is not yet aware of the importance of maintaining dental health. In addition, the characteristics of students like to consume sweet and sticky foods and drinks and are not balanced with dental care.⁵ This is supported by questionnaire data on knowledge and attitudes in maintaining dental health obtained by 23 students (77%) with less categories and good and correct brushing actions as many as 21 students or 70% with less categories.

Children of elementary school age at the age of 6 to 12 years are prone to dental health problems. This is because at this age enters the transition stage of baby teeth to permanent teeth. If the deciduous teeth are not treated, it causes the permanent teeth to break down quickly before the teeth erupt completely. This is supported by Hidayah's research that dental caries experienced by elementary school-age children reached 66.3% and the DMF-T index value aged 6 to 12 showed 5.75 with a high category (Windiyana, Adhani, & Azizah, 2020),(Nurman Hidayah, 2018).

Dental caries is a multifactorial disease that demineralizes the hard tissues of teeth. Toothache experienced can inhibit nutrition and interfere with activity. According to Suwelo that dental hygiene behavior is the most dominant factor causing dental health problems. This is in line with Purwaningsih's research that poor dental and oral hygiene levels are 8 times at risk of causing dental caries (Nurman Hidayah, 2018),(Purwaningsih & Sirat, 2016).

The behavior of maintaining dental hygiene can be done by brushing teeth regularly as a primary prevention effort with time and how to brush your teeth properly and correctly (Junarti, Dyah, & Santik, 2017). Some studies show that children who do not brush their teeth as recommended, have a risk of 2 times the risk of experiencing caries, then as many as 18 out of 41 children experience dental caries with the wrong brushing behavior so that there is a relationship between dental caries and brushing behavior (Ratmini & Yuda, 2017),(Junarti et al., 2017),(Factarun, 2018).

Dental health efforts that have been running in schools through the School Dental Health Business (UKGS) program include promotive, preventive, and curative activities. UKGS carried out aims to improve behavior so as to achieve an optimal degree of health. The behavior does not change quickly but takes 21 days divided by 7 days of introduction, 7 days of repetition and 7 days of reinforcement (KemenKes

RI, 2012),(Fatmasari, Dyah Utami, & Supriyana, 2020). Behavior consists of knowledge, attitudes and actions. Knowledge is mostly acquired through the senses of the eyes and ears. The information captured by the eyes and ears is intended for attitude change and requires repetition in order for the understanding process to occur in the individual. According to Middle Cook, the repetition of information can help change attitudes so that children can determine attitudes that can lead to expected actions (Mrl et al., 2019).

Efforts that have been made in overcoming dental health problems still face obstacles, namely the media used is still focused on teachers so that information has not been conveyed optimally (Junarti et al., 2017). The development of game-based media is a medium that children can use because it is done with fun. Feedback in the game can be given directly from the child. In-game statements can be interpreted directly, so that the information received can be provided easily (Afrinis, Indrawati, & Farizah, 2020),(Supriyono, 2018),(Muslimin, 2015).

Games that can be given are spin wheel board games and puzzles. A spin wheel board game called a circular board game consists of wedges and a pointing needle to stop the board. Meanwhile, puzzle games are the disassembly of pieces of images to produce a complete picture. The game has been widely adopted for use in counseling media because one of the advantages is that it has rules and strategies for playing with challenging advantages so that learning using learning while playing methods can be applied without giving up the actual learning objectives (Gamalielya Gera Simanjuntak, 2022),(Nurpratiwiningsih & Mumpuni, 2019).

Some research on spin wheel board games is used as learning material and modified using cards. The previously studied modification of the spin wheel board is to turn the rotary wheel board and wait for the wheel to stop on one of the jurings containing images and command writing stopped by arrows (Amalia, 2019; Gamalielya Gera Simanjuntak, 2022; Hamzah, Utami, & Zulkarnain, 2019; Rahayu & Paksi, 2018; Nur'aeni Istiqayani Salsabila, Rahmawati, & Isnawati, 2020).

The educational model developed by the researcher is a development of the spin wheel board game and modified with the royal of goose game board game called ROPITA (Round Spin Table). The boxes in the royal of goose game have colors and images specifically designed with the theme of dental superheroes with challenging gameplay and sharpen students' cognitive and skills in maintaining dental health.

The modification of the ROPITA (Round Spin Table) educational model developed in addition to providing games also contains education about maintaining dental health. Board games that are done directly can stimulate thinking, emotions, social interaction, and skills in playing. This is relevant to Wulandari's opinion that board games are very important to sharpen children's brains as a source of knowledge because children can learn with pleasure (B. Octaviani, Tri Ardianto, & Erandaru, 2013),(Murini Wulandari & Purba, 2021).

Based on the background above, one of the innovations and efforts to overcome dental health problems in the dental health education program is through "Modification of the ROPITA (Round Spin Table) Education Model as an effort to improve behavior in maintaining dental health in students at SDN Sendangmulyo 01, Semarang".

RESEARCH METHODS

This research method uses Research and Development (R&D) which consists of 5 stages, namely information gathering, model design, expert validation and model revision, model trials and product results. The method used for model trials used true-experiment (Pretest-posttest with control group design). This study aims to produce a modification of the ROPITA (Round Spin Table) educational model that is feasible and effective as an effort to improve behaviour in maintaining dental health in students at SDN Sendangmulyo 01, Semarang.

The population of this study were students at SDN 01 Sendangmulyo, Semarang as the intervention group and students at SDN Sendangmulyo 02, Semarang as the control group. Sampling using simple random sampling and blinding the subject. The samples in this study were students aged 9 to 11 years, totalling 30 intervention group respondents and 30 control group respondents. This study has received ethical approval from the Health Research Ethics Committee (KEPK) of the Poltekkes Kemenkes Semarang with number 0778/EA/KEPK/2022.

RESULTS AND DISCUSSION

Model Preparation Analysis

The collection of information carried out to 4 resource persons consisting of dentists, dental therapists, principals and class teachers can be concluded that elementary school students enter the stage of cognitive development with the characteristics of high curiosity, active movement and like to play in groups. The UKGS program had stopped but is now running by following health protocols. Programs that have been running have not been optimal and the media used should vary according to student characteristics, namely through games intended to make students focus, not monotonous, and make students bored.

The results of collecting information are the basis for researchers to design models that adjust the characteristics of students, one of which likes to play, therefore, the model made by researchers uses games that aim to increase student understanding, especially in maintaining dental health and guiding students to behave well which students are expected to want and be able to maintain dental health according to the education that has been given.

The implementation of counseling in elementary schools generally begins with objective examination and provision of education using media such as posters or phantom teeth given in one meeting. This situation has an impact on the cooperative level of students to decrease because the media used still focuses on extension workers so that counseling runs less optimally (Junarti et al., 2017), (Supriyono, 2018), (Muslimin, 2015). Based on these problems, researchers developed and produced an educational model in the form of a modification of the ROPITA (Round Spin Table) educational model.

Modification of the ROPITA (Round Spin Table) educational model requires expert validation in providing input or suggestions to improve the model before it is given to respondents. Model expert validation involves 3 expert validations

consisting of dental health education experts, media experts and illustrator design experts obtained a p-value of 0.001, meaning that the modification of the ROPITA (Round Spin Table) educational model is feasible as an effort to improve behavior in maintaining dental health in students at SDN Sendangmulyo 01, Semarang. The conclusion of input or advice from experts on the model that the model is very good, interesting and innovative, and is expected to be able to change the behavior of elementary school students.

The model trial process is carried out to determine the extent to which the products made can achieve goals and objectives. The model trial process was carried out on elementary school students who were divided into 2 groups, namely the intervention group and the control group. Researchers gave models to the intervention group through modifications to the ROPITA (Round Spin Table) educational model and control groups through puzzles.

The result of the model developed by the researcher is a modification of the ROPITA (Round Spin Table) educational model is a model in the form of a rotary wheel board game package modified with the royal of goose game and contains about maintaining dental health. In addition, the implementation of the model contains 4 stages, namely training, education, demonstration and evaluation and is carried out routinely for 21 days. This is in line with Arief's opinion that habits that are carried out every day or routine will always be embedded and remembered by students because students tend to continue to think, behave, and act and eventually form new habits or new habits so as to form appropriate behavior (M. Miftah Arief, Dina Hermina, 2022). The results of the model are the output of the previous stages that have been carried out. The results of the model are as follows:

Gambar 1.1 Model Product Result

1. Board Game of Model



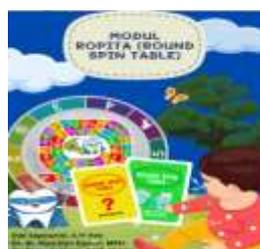
2. Character Pawan of Model



3. Card of Model



4. Modul of Model



5. Phantom Tooth for Demonstation



Statistical Test and Analysis of the Model

Characteristics of Respondent

Respondent characteristics are used to determine the picture of the relationship between respondents' conditions consisting of gender, age and learning achievement to models and behavior of elementary school students. The sample in this study amounted to 60 people consisting of 30 students of SDN Sendangmulyo 01 as an intervention group and 30 students of SDN Sendangmulyo 02 in Semarang city as a control group. As for the ststistical and analysis of the characteristics of respondents as follows:

Tabel 1.1 Characteristics of Respondent

Variable	Group				P-value
	Intervention		Control		
	Total	%	Total	%	
Gender					
Female	13	43	18	60	0,615*
Male	17	57	12	40	
Age					
9 tahun	7	23	7	23	0,169*
10 tahun	12	40	16	54	
11 tahun	11	37	7	23	
Learning Achievement					
>80	15	50	15	50	0,390*
<80	15	50	15	50	

*Leven Test

Gender

The intervention group was generally male as many as 17 respondents and the female control group was 18 respondents so that this study was dominated by the female sex, but the age data was homogeneous or the same so that it did not affect the ROPITA (Round Spin Table) education model on behavior in maintaining dental health.

This is supported by Pay's research that sex variables do not have a significant influence on children's behavior in maintaining dental health (Pay, 2016). This is due to children's daily spending more time with friends playing and doing it in groups and they play with anyone regardless of gender.

Playmates can influence a child's behavior in everyday life. This is supported by Meilan's statement in Aprilianti's research that playmates have a very important role, especially in exchanging and providing information or obtaining new knowledge that is not yet known from their environment so that children's learning outcomes can be improved due to mutual relationships or interactions in groups. (Aprilianti & Effendi, 2021)

Age

The intervention group and control group were generally 10 years old, namely 12 respondents and 16 respondents and were obtained, but the age data were homogeneous or the same so that it did not affect the ROPITA (Round Spin Table) education model on behavior in maintaining dental health.

This is supported by Pay's research that age variables do not have a significant influence on children's behavior in maintaining dental health (Pay, 2016). This is due to students who have different comprehensions, for example, there are students who understand and understand theoretically, but there are students who understand and understand practically so that student behavior can not only be seen from age, but there are other factors that influence student behavior, namely student interest in learning.

If someone has a high interest in learning, he will continue to try so that what he wants is realized according to his wishes. This is in line with Salsabila's research that the amount of a student's interest in learning determines how serious he is to do something and his willingness to learn so that the student's interest in learning will behave well and form good student behavior as well (Azza Salsabila & Puspitasari, 2020).

Learning Achievement

The results of the research analysis obtained the intervention group and the control group in general the value of <80 and >80, namely 15 respondents and 15 respondents in the control group, but the learning achievement data was homogeneous or the same so that it did not affect the ROPITA (Round Spin Table) education model on behavior in maintaining dental health.

This is due to the use of the ROPITA (Round Spin Table) educational model applying the method of playing in groups and is no different from learning in schools. According to Middren Parten in the theory of cooperative play (group play) that group play is characterized by cooperation and involvement of a group of students in a game to achieve learning objectives. (Khadijah & Armanila, 2017) This is supported by Himamie's research that students prefer learning using games that are carried out in groups with their friends (Himmamie & Negeri, 2019)

Learning through games can create a conducive atmosphere that is fun and cooperation in groups, can foster familiarity between students, and encourage students to share information which means that good student abilities will fill the abilities of students who are lacking. Thus, students together can improve self-quality such as developing, honing thinking skills and skills in maintaining dental health (Himmamie & Negeri, 2019).

Normality of Data

Tabel 1.2 Normality Test of Data

Variable	Group	
	Intervantion	Control
	<i>P-value</i>	<i>P-value</i>
Knowledge Pretest	0,11	0,68
Knowledge Posttest	0,06	0,11
Attitudes Pretest	0,71	0,94
Attitudes Posttest	0,60	0,97
Actions Pretest	0,79	0,62
Actions Posttest	0,52	0,67
Debris Index Score Pretest	0,13	0,16
Debris Index Score Posttest	0,06	0,09

* Kolmogorof-Smirnov Test

In table 1.2, the normality test uses the Kolmogorov-Smirnov method because the number of samples in this study is more than 50 samples. Based on the results of the normality test, it was found that the data was normally distributed so that the paired variable effectiveness test was used using the Paired T-Test and unpaired using the Independent T Test.

Effectiveness of ROPITA (Round Spin Table) Education Model Modification

Tabel 1.3 Effectiveness Test of Paired Data

Variable	Group									
	Intervention			Control						
	<i>Pretest</i>		<i>Posttest</i>	<i>P-value</i>	<i>Pretest</i>		<i>Posttest</i>	<i>P-value</i>		
	<i>Mean</i>	<i>SD</i>			<i>Mean</i>	<i>SD</i>				
Knowledge	10,67	1,47	18,40	1,30	0,00*	10,63	1,30	16,53	1,50	0,00*
Attitude	27,53	2,64	47,87	1,63	0,00*	29,17	1,39	40,43	1,50	0,00*
Action	10,80	1,56	18,33	1,35	0,00*	11,53	1,38	17,23	1,57	0,00*
Debris Index Score	2,20	0,41	0,70	0,38	0,00*	2,10	0,33	1,00	0,30	0,00*

*Paired T-Test

Table 1.4 Effectiveness Test of Independent Data

Variable		Group				<i>P-value</i>
		Intervention		Control		
		<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	
Pengetahuan	<i>Pretest-Posttest</i> (Δ)	7,73	2,12	5,90	2,14	0,00*
Attitude	<i>Pretest-Posttest</i> (Δ)	20,33	2,25	11,27	1,46	0,00*
Action	<i>Pretest-Posttest</i> (Δ)	7,53	2,29	5,70	1,90	0,00*
Debris Index Score	<i>Pretest-Posttest</i> (Δ)	1,50	0,36	1,10	0,66	0,00*

*Independent T-Test

Analysis Effectiveness of Model

Knowledge of Elementary School Students

Test results of data effectiveness in pairs of knowledge variables using the Paired Sample T-Test. The average value of knowledge before treatment in the intervention group was 10.80 and after treatment increased to 18.40 while the control group before treatment the average value of knowledge of 10.63 increased to 16.53 so that there was a significant difference in knowledge scores in the intervention and control groups.

The results of the unpaired data effectiveness test using the Independent T-Test showed a difference in the average value of the difference in knowledge that the intervention group was 7.73 compared to the control group which was 5.90 with a p-value of <0.05 . This shows that the intervention group using a modified ROPITA (Round Spin Table) educational model is more effective in increasing knowledge in maintaining dental health in students at SDN Sendangmulyo 01, Semarang than the control group.

The increase in knowledge in the intervention group was due to the modification of the ROPITA (Round Spin Table) educational model which was carried out for 21 days. After being given a model, students already know, understand and can mention about the types and functions of teeth, brushing time, tools and materials for brushing teeth, how to brush teeth properly and correctly, foods and drinks that nourish teeth, foods and drinks that do not nourish teeth, goals and consequences of not brushing teeth and control to dental health services.

The ROPITA (Round Spin Table) board game is accompanied by cartoon images of dental superheroes with various interesting colors. This is supported by the statement of Rusyadi et al., that the delivery of information is necessary for interesting and stimulating media to be followed such as media using cartoon images with various interesting colors. (Rusyadi, Said, & Ulfah, 2020)

Knowledge is influenced by the amount of information a person receives so the more information received, the better the knowledge. This is supported by Darsini's statement in the research of Masrifan et al., that most knowledge is obtained through the eyes and ears and proven through truth (Djamil, Santoso, & Rasipin, 2022). Modification of the ROPITA (Round Spin Table) educational model in playing is done in a fun way and students do not feel bored because students play an active role in the game. While playing, each student competes to collect 8 information cards. The player who gets the card must pay attention to the picture and read the writing to the other players. This means that the delivery of information is received repeatedly so that the model can increase students' knowledge in maintaining dental health. This is supported by several studies that rotary wheel games effectively increase knowledge because rotary

wheel board games are interesting, motivating, help remember and accelerate understanding by creating a pleasant learning atmosphere. (Nur'aeni Istiqayani Salsabila et al., 2020),(Gamalielya Gera Simanjuntak, 2022),(Djamil et al., 2022),(Simbolon, 2019)

Attitudes of Elementary School Students

Test results of the effectiveness of paired data of attitude variables using the Paired Sample T-Test. The average value of attitude before treatment in the intervention group was 27.53 and after treatment increased to 47.87 while the control group before being given treatment the average value of attitude was 29.17 increased to 40.43 so that there was a significant difference in attitude scores in the intervention and control groups.

The results of the unpaired data effectiveness test using the Independent T-Test showed a difference in the average value of the difference in attitude that the intervention group was 20.33 compared to the control group which was 11.27 with a p-value of <0.05. This shows that the intervention group using a modified ROPITA (Round Spin Table) educational model is more effective in improving attitudes in maintaining dental health in students at SDN Sendangmulyo 01, Semarang than the control group.

The increase in students' attitudes towards the ROPITA (Round Spin Table) educational model was influenced by the provision of the model which was carried out for 21 days. After the model was carried out, students' attitudes increased from previously disagreeing to agree that dental health is overall health, want to increase fibrous and watery foods, want to brush teeth 2 times a day, want to brush teeth after breakfast, want to brush teeth before going to bed, want to replace a flared toothbrush with a new toothbrush, do not use a toothbrush together, Want routine control to the dental health service every 6 months, and are not afraid of the tools in the dental health service.

Attitude is a person's belief in something and is second only to knowledge in the realm of behavior. A person's attitude can change if they can change the cognitive component or knowledge first (Notoatmodjo, 2014). Thus, new information obtained through the ROPITA (Round Spin Table) educational model can provide a cognitive foundation or new knowledge for the formation of attitudes in maintaining dental health.

Information conveyed through the ROPITA (Round Spin Table) educational model carries messages that can motivate students so that it can provide a strong enough basis for students to assess something and form attitudes so that student attitudes can improve. In addition, students who have gained information tend to be positive because individual insights have been opened up by the information provided. According to Suryaningsih's research that knowledge and attitudes are the basis for the formation of one's behavior, attitudes are formed after a process

of knowing first, and are strengthened by the application of the given model (Suryaningsih, Widayanti, & Lestariana, 2020). This is in line with research conducted by Gamalielya that rotary wheel games have proven effective in increasing the knowledge and attitudes of elementary school students (Gamalielya Gera Simanjuntak, 2022)

Attitude is inseparable from the knowledge a person has. This is in line with research in Iran found that if children are well informed, children also have a good attitude in maintaining dental health (Kamran A, Bakhteyar K, Heydari H & Z., 2014)

Actions of Elementary School Students

Test results of data effectiveness paired action variables using the Paired Sample T-Test. The average value of action before treatment in the intervention group was 10.80 and after treatment increased to 18.33 while the control group before treatment the average value of action was 11.53 increased to 17.23 so that there was a significant difference in action scores in the intervention and control groups.

The results of the unpaired data effectiveness test using the Independent T-Test showed a difference in the average value of the difference in measures that the intervention group was 7.53 compared to the control group which was 5.70 with a p-value value of <0.05 . This shows that the intervention group using a modified ROPITA (Round Spin Table) educational model is more effective in improving actions in maintaining dental health in students at SDN Sendangmulyo 01, Semarang than the control group.

Changes in the act of brushing teeth after being given the ROPITA (Round Spin Table) educational model that students can already do the act of brushing their teeth in a good and correct way. The ROPITA (Round Spin Table) educational model can improve the act of brushing teeth because in the application of the ROPITA (Round Spin Table) educational model there is also education about brushing teeth and demonstrated using phantom teeth.

The activities provided are not only promotive activities through the ROPITA (Round Spin Table) educational model but also preventive activities through brushing teeth carried out together at school and guided by researchers. In addition, independent brushing activities were carried out at home for 21 days monitored by parents by sending photo evidence of brushing teeth 2 times a day, namely in the morning after breakfast and the night before going to bed in the whatsapp group supervised by researchers. This is supported by the theory of behavior change (behavior change) that behavior change requires a constant and conditioned period of 21 days so that the more often the child does the activity, the easier the child understands and performs according to the information provided (Fatmasari et al., 2020).

Action is an activity or activity carried out by a person from the results of knowledge and attitudes manifested by actions (Notoatmodjo, 2014). Thus, knowledge and attitudes are the basis for the formation of behavior in maintaining dental health so as to have an impact on one's decision to maintain health. According to Pantonuwu in the research of Masrifan et al., that good knowledge followed by a good attitude can influence a person in behavior (Djamil et al., 2022). This is supported by Santoso's research that the provision of model 222 which was carried out for 21 days in addition to increasing knowledge and attitudes as well as the act of brushing teeth so as to effectively increase knowledge, attitudes and actions of brushing teeth in elementary school students (Santoso et al., 2020).

Debris Index Score of Elementary School Students

The results of the test of the effectiveness of paired data debris index score variables using the Paired Sample T-Test. The average debris index score before treatment in the intervention group was 2.20 and after treatment decreased to 0.38 while the control group before treatment the average debris score index of 2.10 decreased to 1.00 so that there was a significant difference in the debris index score in the intervention and control groups.

The results of the unpaired data effectiveness test using the Independent T-Test showed a difference in the average value of the difference in debris index score that the intervention group was 1.50 compared to the control group which was 1.10 with a p-value value of <0.05 . This shows that the intervention group using a modified ROPITA (Round Spin Table) educational model is more effective in reducing the debris index score in students at SDN Sendangmulyo 01, Semarang than the control group.

The decrease in debris index score was caused by treatment not only through promotive activities through modification of the ROPITA (Round Spin Table) educational model but also preventive activities through brushing teeth together guided by researchers. In addition, the debris index score can decrease due to students' compliance with brushing their teeth independently at home which is done 2 times a day, morning and night for 21 days. According to Sulityaningrum that one of the factors that support compliance is the information obtained through the model (Sulistyaningrum, 2019).

Information on maintaining dental health through modification of the ROPITA (Round Spin Table) educational model makes students better understand and apply brushing teeth at school and at home and can practice directly so as to improve skills in brushing teeth properly and correctly. In addition, providing health promotion through an educational model can reduce the debris index score. This is supported by research by Anggraini et al., that there is a decrease in

debris index score after dental health promotion (Selvia Anggraeni, Torry Duet Irianto, 2019).

CONCLUSION

Based on the results of the study, It can be concluded that the modification of the ROPITA (round Spin Table) education model is feasible and its application is effective as an effort to improve behaviour in maintaining dental health in students at SDN Sendangmulyo 01, Semarang compared to the control group.

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