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Development of a Traditional Game Module to Improve Children's Self-Control Character Skills

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Abstract

This research intends to guide teachers in developing self-control in children aged 9-12 through traditional games. The research method used was Research and Development (R&D) with the ADDIE framework (Analyze, Design, Develop, Implement, and Evaluate) involving six teachers, seven module validators, and six children. The research findings are as follows: The module received a "very good" rating with a score of 3.40 from one lecturer and five teachers. The surface and content validity tests received a "very good" rating of 3.50 and 3.55, respectively. 3) The application of the module has a positive effect on the self-control of children aged 9-12 years, with a high level of effectiveness of 88.70%. The research results showed that after using the module, the average posttest score (M = 0.9217) was higher than the pretest score (M = 0.6650). This difference is significant, with a value of tt(5) = 4.122, p = 0.009 (p < 0.05). This module also has quite a big influence, with an effect size (r) of 0.88 or the equivalent of around 77.26%. In other words, the module has a fairly large role, contributing 77.26% to increasing self-control. The effectiveness of implementing the module is further proven by the N-gain score of 88.7073%, which shows a high level of effectiveness. Thus, this research provides a strong empirical basis for developing better educational programs, especially in improving self-control in children aged 9-12 through a traditional game approach.

Keywords

Traditional Games; Self-Control; Research and Development

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1. INTRODUCTION

Family is very important in shaping a child's personality. Children's behavior reflects the habits of the family and society around them(Yue et al., 2006). If children are not taught by their parents to control their emotions and behavior, they will have difficulty controlling themselves (Sabir, 2007). This can have a bad impact if the child experiences unpleasant things from parents or other people. Children who grow up in a harsh environment tend to have harsh traits, and vice versa. Therefore, self-control is important to regulate their thoughts and actions according to their intentions(Borba, 2008). Self-control involves various indicators that help measure an individual's ability to manage themselves and interact with others. The following are indicators of the character of self-control, which are the basis for developing this character, as explained by(Borba, 2008): 1) Not interrupting the conversation: the ability



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to listen patiently without interrupting the other person's conversation. 2) Patience in waiting your turn: the ability to wait without feeling anxious or angry. 3) Not easily angered: the ability to control anger and not get emotional easily. 4) Able to refrain from acts of physical aggression: the ability not to use physical violence in response to conflict or frustration. 5) No need to be reminded to behave well: the ability to behave well without needing to be reminded or forced by others. 6) Able to remove oneself from disturbing situations: avoiding confrontation or leaving disturbing situations calmly. 7) The ability to return to calm in high emotions: the ability to return to calm when too happy, frustrated, or angry. 8) Able to overcome impulses and impulsive actions without the help of adults: the ability to control impulses and impulsive actions without requiring the help of adults. 9) Rarely explodes or loses control: the ability to rarely experience emotional outbursts or lose control of oneself. 10) Rarely acts without thinking or carelessly: the ability to rarely act without thinking first or make careless mistakes. These indicators are the basis for developing self-control in children. The ability to control oneself and act wisely in various situations can help children grow and develop positively in their livestheir life.

According to (Juniman, 2018), self-control problems often occur in the form of physical violence and bullying in children aged 13-15 years at school. The data analyzed covers 122 countries, representing approximately 51% of the population of adolescents aged 13-15 years worldwide. The results of the analysis show that around 50% of children experience violence at school. This violence and bullying can harm children's growth and development. However, another problem that needs to be considered is parents' lack of emotional control, which can result in them venting their anger and stress on their children due to busy work. This can hinder the development of children's self-control (as explained by Borba, 2015: 97). Self-control is also related to culture and habits in the child's social environment. Culture often reflects the concept of "virtue," which includes elements of creation, taste, and charity. Culture is resulted from interpreting creation, taste, intention, and feeling (Koentjaraningrat, 2003). Culture, defined as "a way of life rooted in society," has an important role in human life. Apart from that, the cultural function explained by Ndraha (2005: 21-22) includes various roles and meanings in society. The following is a further explanation regarding the function of culture: a) as a mechanism for adaptation to change, b) as a pattern of behavior, c) as a community mental program, d) as a driver or changer, e) as the ability to create added value, f) as national identity, g) as cultural heritage, h) as a substitute for formalization, i) as a binder for society, j) as a unifying process, k) as a product of a unifying process and l) as a source (Ndraha, 2005: 21-22).

Culture plays a role in shaping individual behavior to suit a culturally rich environment. Apart from that, you also associate the influence of brain networks in forming behavioral stimuli, which include richness of variety, richness of stimuli, and elements of pleasure (Jensen, 2008). Furthermore, culture can be integrated into learning by implementing relevant learning strategies. (Sardjiyo & Pannen, 2005) Sardjiyo and Pannen have identified the importance of culture in learning and proposed that learning can integrate a brain-based learning model through three main stages, namely a) creating a learning environment that stimulates children's thinking, (b) active learning environment, and (c) creating a pleasant learning environment (Sapa'at, 2009). A learning environment that stimulates children's thinking can be implemented through games. There are two types of games, namely modern games that use technology and traditional games that are rooted in norms and customs, involve more than one player, have become habits passed down from generation to generation, and carry important character values. for child development(Iswinarti, 2017). Based on this explanation, the main focus of this research is on the application of traditional games in that more than one player plays, has positive values, and encourages children's character development. Traditional games have special characteristics, namely (1) the players use the tools and facilities around them without the need for special purchases, and (2) they involve quite a large number of players, according to Win (2015:34). Traditional games provide benefits from a social perspective, forming discipline and strengthening good character values(Laksmitaningrum, 2017).

The study of self-control in children can be seen from various points of view. Character education

at an early age plays a role in forming self-control through habituation and example(Cahyaningrum et al., 2017). Apart from that, self-control can also be influenced by dependence on the internet (Harahap, 2017). Efforts to increase self-control in children in correctional institutions have been carried out through art therapy and have produced significant results (Kusumawardhani et al., 2018). Self-control can also be developed through traditional games, which positively impacthildren's growth and development(Handoyo & Yudiwinata, 2014). Getting used to traditional games in elementary school has benefits for the growth of children's character, including cooperation, honesty, self-confidence, and concern for others. (Lailifitriyani, Pertiwi & Muslimin, 2018). Previous research has examined character education in general as well as studying traditional games. However, there is still a lack of research that focuses on self-control character education in elementary school children, especially those aged 9-12 years. This research is related to the development of traditional game modules to shape the self-control character of children at that age. This traditional game module was developed by taking into account the following ten module development indicators: 1) Wide variety, 2) Full of stimulation, 3) Fun, 4) Concrete and practical, 5) Encourages critical thinking and problem solving skills, 6) Supports creative thinking skills, 7) Develop communication skills, 8) Facilitate collaboration skills, 9) Emphasize cultural diversity, 10) Encourage self-control skills. Apart from that, there are ten indicators of self-control character which are the basis(Borba, 2008), such as not interrupting a conversation, patiently waiting your turn, controlling anger, refraining from physically aggressive actions, behaving well without needing to be reminded, being able to avoid situations that trigger anger, being able to return to calm when emotions are high., copes with impulses and impulses without the help of adults, rarely has emotional outbursts, and rarely acts carelessly or recklessly.

This research focuses on self-control character education in children. Researchers developed five traditional games from various regions in this research, namely canang from the Riau Islands, shellfish from Jambi, arogan from West Sumatra, lantun from Bengkulu, and bitingan from Central Java. This research only focuses on creating traditional game modules for children aged 9-12 years to be more focused and effective in meeting the specific needs of children at this age development phase.

2. METHODS

The data collection method uses ADDIE-type product development research. ADDIE consists of five stages, namely: 1) Analysis, 2) Design, 3) Develop, 4) Implement, and 5) Evaluate (Tung, 2017:57). The ADDIE stages are explained below.

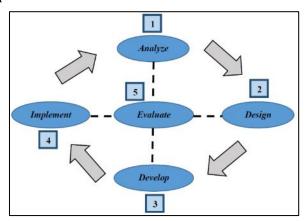


Figure 1. Image of ADDIE Type Research Stages

This analysis stage is used to examine the model or learning method used. The goal is to find appropriate solutions or teaching materials. This is done through open and closed questionnaires to analyze the character education needs of children aged 9-12 years. The questionnaire includes variety, stimulation, fun, concreteness, critical thinking, creativity, communication, collaboration,

multiculturalism, and self-control indicators. This questionnaire was distributed to several certified teachers in various regions, such as Yogyakarta, Klaten, Gunung Kidul, Kulon Progo, Sleman, and Bantul. Data analysis was carried out using a Likert scale with a value range of 1-4. After analyzing needs, we designed products in the form of traditional game modules from various regions to help develop the character of self-control. This module is then tested for validity through the opinions of experts and teachers certified at the development stage by considering various aspects such as diversity, stimulation, concrete operations, critical thinking, creativity, communication, collaboration, multiculturalism, independence, and control. Modules based on the suggestions and input of experts and teachers are implemented at the implementation stage. The implementation phase was used as a means of limited testing of the development of a national game module for six children (three boys and three girls). The application of the game also prioritizes providing formative and summative evaluations in line with the evaluation stage to determine the feasibility level of the product being developed. The formative and summative evaluations developed from ten indicators of self-control: patience, not getting angry easily, not interrupting conversations, restraining oneself, being polite, being free to let go, being calm again, dealing with impulses, rarely getting angry, and thinking. Before going into action with the score 1-0. Formative analysis is needed to categorize three important elements: creation, taste, and intention(Lickona, 2013). Data analysis was carried out at the evaluation stage by testing the normality of data distribution, significance testing, and the application of traditional game modules. The overall statistical analysis was processed through the IBM SPSS Statistics 26 for Windows application with a confidence level of 95% on two sides.

3. FINDINGS AND DISCUSSIONS

The results of data analysis are obtained through the ADDIE steps, which consist of (1) analysis, (2) design, (3) development, (4) implementation, and (5) evaluation (Tung, 2017:57). The analysis stage was carried out by giving closed and open questionnaires to five teachers who had been certified in Yogyakarta, Bantul, Gunung Kidul, Klaten, and one teacher from outside Java, namely Tanjungpinang City. The closed questionnaire uses a 1-4 Likert scale, with a value of 4 very often, 3 often, 2 sometimes, and 1 rarely. The following are the needs analysis results based on a closed questionnaire.

Table 1. Summary of Needs Analysis Results with Close	d Questionnaire
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No.	Indicator	Average			
1	Rich variety	2.80			
2	Rich in simulation	2.20			
3	Pleasant	2.40			
4	Operational-concrete	2.00			
5	Critical thinking	1.60			
6	Creativity	1.80			
7	Communication	1.80			
8	Collaboration	1.80			
9	Multicultural	1.73			
10	Self-control	2.26			
	Average 2.01				

The results of the analysis based on a closed questionnaire show that the lowest average of all indicators is found in the multicultural indicator, with a score of 1.73. Meanwhile, the highest average is found in the rich variation indicator, with a score of 2.80. The overall mean of the closed questionnaire was 2.01. The following table has converted this score from quantitative to qualitative data.

No.	Score Range	Category
1	3.26 - 4.00	Very good
2	2.51 - 3.25	Good
3	1.76 - 2.50	Not good
4	1.00 - 2.75	Very bad

The average score of 2.01 is included in the "not good" category. From these results, it can be seen that there is a gap between the learning model that should be implemented and the existing reality. From these bad results, an open analysis carried out on five certified teachers in Yogyakarta, Bantul, Gunung Kidul, and Klaten, as well as one teacher from Tanjungpinang City, revealed that the application of self-control character development media is still limited and inadequate. This character development has not been the main focus, especially due to limited media, which influences learning styles during the learning process. Apart from that, the school also does not have a self-control character development module. Based on these circumstances, it is necessary to develop an effective learning model to develop children's self-control through the application of methods and theories that are based on the ten indicators of self-control. This learning model will be integrated into traditional game modules with the hope that it can be a solution for developing self-control character.

Next, in the design stage, we address the problems identified in the previous stage by formulating research objectives. The traditional game module that will be developed starts from the cover page, foreword, and table of contents. The middle part of this module will contain relevant studies, such as culture-based learning, 21st-century skills, brain-based learning, self-control, and ten indicators of traditional game modules that want to be developed. This module will also explain five traditional games from various regions, such as Bengkulu, Jambi, West Sumatra, Central Java, and the Riau Islands, which can help children develop the character of self-control. Each game will have an introduction, objectives, playing procedures, and regional songs that are appropriate to the region of origin. The implementation of this traditional game will follow stages consisting of initial, core, and final activities. The final section of a traditional gaming module would include a glossary, reference list, module summary, and author bio.

At the development stage, module development is based on several aspects, namely learning sources, validation of learning resources, and validation through expert judgment. This stage aims to improve the traditional game module prototype before implementation. Development begins with designing a cover page with a front and back cover. The front cover will feature the module title and a picture of children playing with snakes and ladders, illustrating the importance of self-control in marching and regulating emotions while playing. The back cover has a synopsis of the traditional game module and the author's biodata. Next, there is a foreword and a list of module contents. An image of a traditional game module is outlined below.

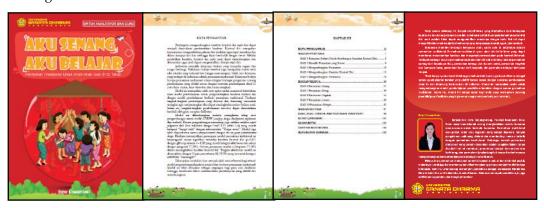


Figure 2. Home Page Traditional Game Module

An explanation of the module's contents is given through five chapters in the first part: Chapter 1 discusses cultural richness for self-control character, Chapter 2 discusses how to choose a suitable game, Chapter 3 discusses the steps for developing a game, and Chapter 4 discusses development. Self-control character and Chapter 5 discusses how to develop a game. Chapter 1 explains culture-based learning, brain-based learning, Piaget's constructivism, Vygotsky's social and cultural-based learning, and 21st-century skills. Chapter 2 discusses how to choose developmentally appropriate games for children aged 9-12 years based on the need for effective learning. Chapter 3 outlines the steps in game development, which are then outlined in convergence theory for developing characters through traditional games. Chapter 4 discusses character education, character self-control, steps to develop character self-control in children aged 9-12 years, and indicators of character self-control. Chapter 5 integrates game development as a means to develop the character of self-control in the five traditional games described. The first part of the picture is presented in the following figure.

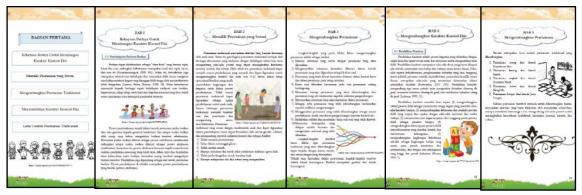


Figure 3. Description Part One

The five traditional games are explained in chapters 6 to 10 in the module. Each game is selected from various regions, taking into account suitability for children aged 9-12 years. Each chapter contains information about the history of the game, the unique characteristics of the game, its benefits, and the steps to play it, including the initial, core, and final activities. Initial activities include opening the game and explaining the goals and objectives of the game. Core activities involve understanding and discussing the game. The final activity includes drawing conclusions and closing, including reflection and providing formative and summative evaluations. Formative evaluation (posttest) and summative evaluation (pretest) are used to assess children's understanding of the character of self-control after participating in implementation activities. Further explanation regarding the second part of the traditional game module can be seen below.

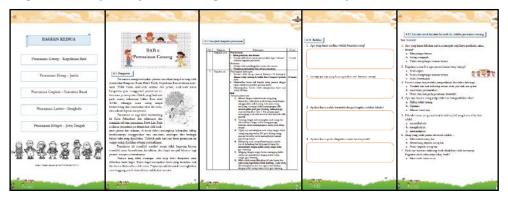


Figure 4. Part Two Traditional Game Module.

The last page contains answer keys for formative and summative evaluations (pretest and posttest), a glossary, and a list of references to traditional game modules for developing self-control character.



Figure 5. Final Part of the Traditional Game Module

The traditional game module that has been created is then tested for validity through two aspects, namely surface validity and content validity. The surface validity test was carried out involving five certified teachers from various regions, including Yogyakarta, Bantul, Gunung Kidul, Klaten, and one teacher from outside Java, namely Tanjungpinang City. Surface validity is an assessment of the suitability between the external image or physical appearance of the module and the variables or material that you want to measure or discuss in the module (Murti, 2011: 3). The surface validity test in this research consists of three parts, namely readability test, module completeness test, and module characteristics test. Module readability and completeness tests are carried out to evaluate how readable this module is and to what extent it meets completeness requirements. This assessment involves experts using a rating scale of 1-4, with a score of 4 strongly agree, 3 agree, 2 disagree, and 1 disagree. The results of the module's readability and completeness test based on expert assessments will be explained further below.

NI.	Variable	Indicator	Validator				A	Mataa
No. Va	variable	indicator	1	2	3	4	Average	Notes
1	Legibility	Systematic	4	4	4	4	4.00	
		Writing system	4	3	3	3	3.25	
		Language	3	3	3	3	3.00	
		Sentence structure	4	3	4	3	3.50	
		punctuation	3	3	3	4	3.25	
2	Completeness	Cover	3	4	4	3	3.50	
	_	Fill in the module	3.33	3.33	3.00	3.33	3.24	
		Illustration	3	4	4	3	3.75	
		Average	3.50	3.40	3.40	3.33	3.40	

 Table 3. Module Readability and Completeness Test Results.

The systematic indicator's highest score on the module readability and completeness test is 4.00. The lowest score is 3.00 for language use. The average value is also similar, namely 3.25 for the grammar indicator with punctuation, and 3.50 for the cover indicator with sentence structure. The module content score is 3.24, while the illustration score is 3.75. Overall, the average score of the module readability and completeness test results is 3.40. These score results are then converted from quantitative to qualitative data using certain tables.

Table 4. Turn Quantitative Data into Qualitative with Recommendations.

No.	Score Range	Category	Recommendation
1	3.26 - 4.00	Very good	No need for revision
2	2.51 - 3.25	Good	Need a little revision
3	1.76 - 2.50	Not good	Need major revision
4	1.00 - 2.75	Very bad	Need a complete overhaul

Based on Table 4, the average readability and completeness test score for the module is 3.40, which is included in the "very good" category with a recommendation of "no need for revision" of the traditional game module. Next, the characteristics of traditional game modules will be tested. The validation test for the characteristics of this module involves indicators such as self-instructional, self-contained, stand alone, adaptive, and user friendly. An explanation of the results of testing the characteristics of the module will be presented below.

NI.	37	I., J.;	Validator			A	NT 4	
No.	Variable	Indicator	1	2 3 4 Average	Notes			
1	Characteristics	Self-instructional	3.16	3.67	3.50	3.67	3.50	
		Independent	3	4	4	3	3.50	
		Stand-alone	2	3	4	4	3.25	
		adaptive	3	3	4	4	3.50	
		Easy to use	4	4	4	3	3.75	
		Average	3.50	3.40	3.40	3.60	3.40	

Table 5. Module Characteristics Validation Test Results.

Based on the validation test of module characteristics, the highest average score is found in the user-friendly indicator at 3.75. Meanwhile, the lowest average score was found on the stand-alone indicator at 3.25. Independent and independent learning indicators have the same average score, namely 3.50. The overall average score was 3.50, and it fell into the "excellent" category with a recommendation of "no revision needed" for the traditional game module. However, the content validity test is different because it involves 10 indicators of effective learning, such as rich variety, rich stimulus, fun, operational concrete, critical thinking, creativity, communication, collaboration, multiculturalism, and self-control. Details of the content validity test results will be described in the following table.

NI-	Variable	Indicator		Vali	dator		- Average	Natas
No.	variable	indicator	1	2	3	4		Notes
1	Effective	Rich variety	3	4	4	4	3.75	
	learning	Rich in simulation	4	4	3	4	3.75	
		Pleasant	4	4	4	3	3.75	
		Operational-concrete	4	4	4	3	3.75	
		Critical thinking	3	4	3	3	3.50	
		Creativity	3	3	4	3.50	3.37	
		Communication	3	4	3	3	3.50	
		Collaboration	3	4	3	3	3.50	
		Multicultural	3.67	3.33	3.67	3.67	3.58	
		Self-control	3.33	4	3.67	3.33	3.58	
		Average	3.40	3.73	3.67	3.40	3.55	

Table 6. Content Validity Test Results.

From the table of content validity test results above, it can be seen that 3 indicators have the same score, namely, rich in variety, rich in stimulus, and fun, all with an average score of 3.75. The critical thinking, communication, and collaboration indicators have the same average score, namely 3.50. The creativity indicator has a score of 3.37. The multicultural and self-control indicators have the same average score of 3.58. Overall, the average score of the content validity test results is 3.55. Based on Table 4, a score of 3.55 is obtained, which is in the "very good" category with a recommendation of "no revision needed" for the traditional game module. A summary of the average validation results through expert judgment can be seen in the table below.

Table 7. Resume Validation Results Based on Expert Judgment.

No.	Validation	Score Range	Category	Recommendation
1	Surface validity			
	a. Readability and completeness	3.40	Very good	No need for revision
	b. Characteristics	3.50	Very good	No need for revision
2	Content validity	3.55	Very good	No need for revision
	Average	3.48		

The average expert validation score results show that the traditional self-control character development game module has reached a good readability level and is by the characteristics of the module. This module also meets the indicators of effective learning based on content validity assessment. Overall, the module obtained an average score of 3.48, which is in the "very good" category with a recommendation of "no revision needed" for the next stage.

The implementation stage of the traditional game module for children aged 9-12 years has three stages: preparation, implementation, and evaluation. The preparation includes children, preparing tools and materials, pretest and posttest questions, recording anecdotes, and short interviews with parents. The implementation lasted for 6 days, which included initial, core, and final activities. In the early stages, there are obstacles, such as some children not knowing traditional games. Game execution is taking longer than scheduled. Formative and summative evaluations are carried out at the end of each match. The final stage includes singing, prayer, and giving a posttest. Evaluation result data is analyzed at the evaluation stage.

The evaluation stage is used to assess product quality using formative and summative evaluations, which include ten self-control indicators. These indicators include being patient, not getting angry easily, not interrupting conversations, restraining yourself, being polite, being free to disengage, remaining calm, overcoming impulses, rarely getting angry, and thinking before acting (Borba, 2008: 106). Details of the score result from the formative and summative evaluation are presented in the following table.

Table 8. Formative Evaluation Assessment Results.

NI-	Indicator		Game					
No.	mulcator	1	2	3	4	5	Average	
1	Be patient	0.33	0.50	0.83	1.00	1.00	0.73	
2	Not easily angered	0.50	0.50	0.83	0.83	1.00	0.73	
3	Don't interrupt the conversation	0.50	0.67	0.67	0.83	0.83	0.70	
4	Refrain	0.67	0.83	0.83	1.00	0.83	0.83	
5	Be polite	0.67	0.67	1.00	1.00	0.83	0.83	
6	Free attitude	0.50	0.33	1.00	0.83	0.67	0.66	
7	Relax	0.67	0.33	0.67	0.83	1.00	0.70	
8	Dealing with urges	0.50	0.83	0.67	1.00	0.83	0.76	
9	Rarely angry	0.33	0.67	0.83	0.83	1.00	0.73	
10	think before act	0.83	0.83	0.83	1.00	1.00	0.89	
	Average	0.55	0.61	0.81	0.91	0.89	0.75	

Table 9. Summative Evaluation Assessment Results.

No.	Indicator		Game						
INU.	mulcator	Prates	Posttest	Difference	%				
1	Be patient	0.60	0.94	0.34	34.44				
2	Not easily angered	0.55	1.00	0.45	45.00				
3	Don't interrupt the	0.30	0.58	0.28	28.33				
	conversation								

No.	Indicator	Game					
NO.	indicator	Prates	Posttest	Difference	%		
4	Refrain	0.70	0.92	0.22	21.67		
5	Be polite	0.80	1.00	0.20	20.00		
6	Free attitude	0.66	1.00	0.34	34.00		
7	Relax	0.80	1.00	0.20	20.00		
8	Dealing with urges	0.66	1.00	0.34	34.00		
9	Rarely angry	0.80	1.00	0.20	20.00		
10	think before act	1.00	1.00	0.00	0.00		
	Average	0.67	0.94	0.26	25.74		

From the formative evaluation table above, indicator No. 6 has the lowest score, namely 0.66 points, while indicators No. 1, 2, and 9 have a score of 0.73. Indicators 3 and 7 obtained a value of 0.70. Indicators 4 and 5 have a score of 0.83, and Indicator 8 has a score of 0.76. Indicator 10 has the highest score, namely 0.89. The results show an increase in the average formative score per game. In the summative evaluation table, indicator 2 experienced the highest increase of 45.00%, while indicator 1 experienced an increase of 34.44%. Indicators 6 and 8 increased by 34.00%, indicator 3 increased by 28.33%, and indicator 4 increased by 21.67%. Indicators 5, 7, and 9 experienced an increase of 20.00%, and indicator 10 did not experience an increase. However, overall, the pretest and posttest results have increased, as seen in the bar chart below.

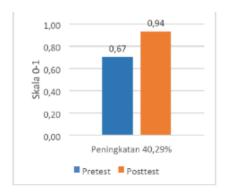


Figure 6. Pretest and Posttest Improvement

The average increase from the pre-test to the post-test was 40.29%. To determine whether this increase is significant, a statistical test will be carried out using IBM SPSS Statistics 26 for Windows with a confidence level of 95%. Statistical tests that will be carried out include normality tests and significance tests.

Table 10. Data Distribution Normality Test Results.

Analysis Techniques	Test	W	P	Information
Shapiro-Wilk test	Prates	0.920	0.507	Normal
	Posttest	0.912	0.450	Normal

Table 11. Significance Test Results Increase from Pretest to Posttest.

Analysis Techniques	Q	\boldsymbol{P}	Information
Paired sample t-test	4.122	0.009	Important

The paired t-test significance test results show that the average post-test score (M = 0.9217, SE = 0.03156) is higher than the pre-test score (M = 0.6650, SE = 0.04217), and the difference is significant. Value t(5) = 4.122, p = 0.009 (p < 0.05). Thus, we can reject the null hypothesis (Hnull). These results show that the application of traditional game modules positively influences children's self-control character.

Table 12. Score Improvement Effectiveness Criteria.

R (effect size)	Category	Percent (%)	
0.10	Little effect	1	
0.30	Medium effect	9	
0.50	Great effect	25	

Based on the criteria above, the correlation coefficient r in this study was 0.88, which is included in the large influence category or equivalent to an influence of 77.26%. This means that the application of this module contributes 77.26% to increasing children's self-control characteristics. The results of the significance test of the paired sample t-test show that the self-control characteristic score increased significantly from pretest to posttest. However, it is necessary to analyze the N-gain score to understand the extent to which these improvements are effective.

Table 13. N-Gain Score Test Results.

Analysis Techniques	Average	Range Score	elementary school	N-gain score (%)	Information
Prates	0.67	0-1	20.57807	88.7037	Tall
Posttest	0.94				

Based on the table above, the results show that the N achievement score of 88.7037% indicates a "high" level of efficiency based on Hake's (1999) criteria. In the pre and post-test results (see Table 4.7), it can be seen that the "not easily offended" index experienced the largest increase, namely 45.00%. In addition, the index "target number of patients" increased by 34.44%, while the indicators "liberal attitude" and "impulsive coping ability" increased by 34.00%. The "uninterrupted conversation" index increased by 28.33%, and the "limited quantity" index increased by 21.67%. However, the index of "politeness," "calmness," and "rarely getting angry" increased by 20.00%. The "think before acting" index did not increase.

The path diagram of the semantic analysis of autonomous characters above shows three main keywords, namely "control of negative emotions," "initiative," and "rational thinking." This is to the view that developing effective moral values must include moral knowledge, feelings, and actions. This semantic diagram shows many signs that point to the keyword "kindness," such as "patience," "not easily irritated," "not interrupting the conversation," and "able to control and overcome impulsivity." Next, some indicators lead to the keyword "understanding norms," such as "politeness," "freedom," and "think before acting." Two indicators, "calm" and "rarely angry," also show good performance. This grouping of indicators ensures that efforts to develop children's self-control involve comprehensive development that includes understanding norms, friendly behavior, and good behavior. This semantic diagram of self-control traits explains the concept further.

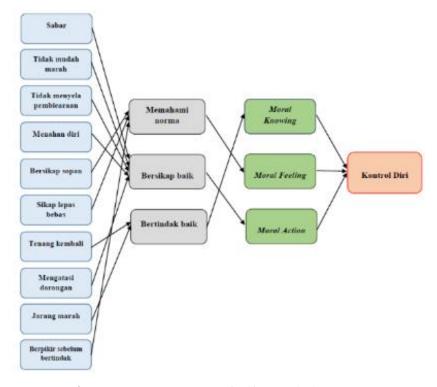


Figure 7. Semantic Diagram of Self-Control Characters

The research results show that the application of the module in developing self-control in children aged 9-12 years has a significant and effective impact. The effectiveness level of 88.70% indicates that this module has substantially improved children's self-control abilities. The higher mean posttest score (M = 0.9217) compared to the pretest score (M = 0.6650) indicates a marked improvement after participation in the program. The significance of the difference between pretest and posttest scores, with values of t (5) = 4.122 and p = 0.009 (p < 0.05), strengthens the evidence that these changes did not occur by chance. This module not only provides a positive impact but also has quite a large influence, as evidenced by the effect size (r) of 0.88 or around 77.26%. This means that approximately 77.26% of the increase in self-control can be directly attributed to using the module. The importance of implementing this module can also be seen from the high N-gain score, 88.7073%. This score reflects a high level of effectiveness in improving children's understanding and self-control skills. Overall, these findings provide a strong basis for recommending the use of the module in the context of character education for children aged 9-12 years, with the potential to become a model for similar programs. This research is also supported by Mahfud's research(Mahfud et al., 2023), which states that game strategies can be used as a medium to develop self-control in students, which includes behavioral control, cognitive control, and decision control.

4. CONCLUSION

Traditional play modules designed to develop self-control in 9-12-year-olds received a quality rating of "Excellent." This can be seen from the results of the follow-up validity test, which shows a score of 3.40 in the "Very Good" category for readability and completeness and a score of 3.50 in the "Very Good" category for module characteristics. The results of the content validity test also show a score of 3.55, which is also classified as "Very Good." The overall assessment of five expert assessors indicated that the quality of the module was "Very Good," with a recommendation not to make additional edits.

The test results show that the application of traditional game modules has a significant influence onself-control character children aged 9-12 years. The average post-test score is higher than the pre-test score, and the difference is very significant with a value of t (5) = 4.122, p = 0.009 (p < 0.05), so Hnull is

rejected. This means that the application of traditional game modules has a positive influence onself-control character. The correlation coefficient r of 0.88 shows a very large influence, equivalent to 77.26%, in improving the character of self-control in children. This means that this module has a fairly large role in improving self-control character. In addition, the performance results of implementing the module with an N-gain score of 88.7073% show high efficiency in improving self-control character. This shows that this module is effective in improvingself-control character in children.

REFERENCES

- Borba, M. (2008). Membangun kecerdasan moral: Tujuh kebajikan utama untuk membentuk anak bermoral tinggi. PT Gramedia Pustaka Utama.
- Cahyaningrum, Sudaryanti, & Purwanto. (2017). Pengembangan nilai-nilai karakter anak usia dini melalui pembiasaan dan keteladanan. 6(2), 203–213.
- CNN. (2018, 08 September). UNICEF: Sekolah tidak aman bagi siswa. Diakses tanggal 24 Januari 2021, dari https://www.cnnindonesia.com/gaya-hidup/20180907163958-284-328572/unicef-sekolah-tidak-aman-bagi-siswa
- Hake, RR (1999). Menganalisis perubahan/perolehan skor. California: Universitas Indiana.
- Handoyo, P., & Yudiwinata, H. P. (2014). Permainan tradisional dalam budaya dan perkembangan anak. *Paradigma*, 2(3), 1–5.
- Harahap, S. M. (2017). Hubungan antara kontrol diri dengan ketergantungan internet di pustaka digital perpustakaan daerah Medan. *Edukasi*, *3*(2), 131–145.
- https://media.neliti.com/media/publications/250340-permainan-tradisional-dalam-budaya-dan-p-f7662255.pdf
- Hurlock, EB (2006). Psikologi perkembangan suatu pendekatan sepanjang rentang kehidupan. Edisi kelima. Alih bahasa Istiwidayanti dan Soedjarwo. Jakarta: Erlangga
- Ibda, F. (2015). Perkembangan kognitif teori Jean Piaget. Intelektualita. 1(3). 27-37.
- Iswinarti. (2017). Permainan tradisional: Prosedur dan analisis manfaat psikologis.
- Jensen, E. (2008). Brain-based learning: Pembelajaran berbasis kemampuan otak: cara baru dalam pengajaran dan pelatihan (2nd ed.). Pustaka Pelajar.
- Juniman, P. T. (2018). UNICEF: Sekolah tidak aman bagi siswa. CNN Indonesia.
- Koentjaraningrat, R. M. (2003). Pengantar antropologi I. PT Rineka Cipta.
- Kusumawardhani, Kurnianingrum, & Soetikno. (2018). Art therapy untuk meningkatkan kontrol diri pada anak didik lapas. *Jurnal Muara Ilmu Sosial, Humaniora, Dan Seni,* 2(1), 135–143.
- Lailifitriyani, Pertiwi, S., & Muslimin. (2018). Pembiasaan permainan tradisional sebagai upaya menumbuhkan nilai-nilai karakter pada siswa sekolah dasar. 166–171.
- Laksmitaningrum, A. A. (2017). Keterlaksanaan permainan tradisional dalam pembelajaran penjasorkes di sekolah dasar negeri sekecamatan Ngaglik Kabupaten Sleman tahun ajaran 2016/2017. *PGSD Penjaskes*, 5.
- Lickona, T. (2013). Educating for character: How our schools can teach respect and responsibility. Publishing History.
- Mahfud, M., Susanto, N., Widyasari, R., Firdaus, F., & Witasari, R. (2023). Traditional Games as A Learning Strategy to Develop Students' Self-Control. *QALAMUNA: Jurnal Pendidikan, Sosial, Dan*

- Agama, 15(2), 667-674. https://doi.org/10.37680/qalamuna.v15i2.3176
- Murti, B., (2011). Validitas dan rehabilitas pengukuran. Surakarta: Universitas Sebelas Maret.
- Owens-Sabir, MC (2007). Pengaruh keterikatan ras dan keluarga terhadap harga diri, pengendalian diri, dan kenakalan. Pub Ilmiah Lfb Llc.
- Sapa'at, A. (2009). Pembelajaran berbasis otak (online): http://home.matematika.upi.edu/2009/09/23/brain-based-learning/. (Diakses pada 19 Maret 2020)
- Tung, KY (2017). Desain instruksional. Yogyakarta: Penerbit ADDIE.
- Widodo & Lumintuarso (2017). Pengembangan model permainan tradisional untuk membangun karakter pada siswa SD kelas atas. Jurnal keolahragaan. 5(2), 183-193. file:///C:/Users/sistem/Downloads/7215-40722-1-PB.pdf
- Menang. (2015). Mengenal sepintas seni budaya Bali. Bali: PT Mapan.
- Sardjiyo, & Pannen, P. (2005). Pembelajaran berbasis budaya: model inovasi pembelajaran dan implementasi kurikulum berbasis kompetensi. *Jurnal Pendidikan*, 6(2), 83–97.
- Yue, T., Xian, K., Hurlock, E., Xin, M., Kernie, S. G., Parada, L. F., & Lu, Q. R. (2006). A critical role for dorsal progenitors in cortical myelination. *Journal of Neuroscience*, 26(4), 1275–1280.