Engklek Game" in mathematics: How difference and relationship student attitude towards science process skills?

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Abstract

This study aims to integrate the local wisdom of the traditional engklek game into problem-solving-based mathematics learning at the elementary school level. The method used in this study is a mixed-method with an explanatory design. The data analysis technique used in this study was random sampling and data collection was carried out by distributing observation sheets about student process skills, student learning interest questionnaires and conducting interviews with students and teachers at the school. Based on the results obtained by the researchers, it can be found that there is interest in learning and skills of students in grades IV A and IV B in the engklek game in mathematics subjects at State Elementary Schools. In addition, there is a relationship between students' interest in learning and students' process skills in mathematics subjects at State Elementary Schools.

Keywords: Mmathematics, local Wisdom, engklek games, iinterest, process skills, elementary School.

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1. Introduction

1.1 Conceptual or Theoretical Framework

Local wisdom can be seen as a way of life and knowledge as well as various life strategies by local communities in answering various problems. Local wisdom from the culture found by the local community cannot be separated from the language of the community itself (Sandoval-Rivera, 2020; Bahri et al., 2021). Local wisdom which becomes the social basis can play a very important role in increasing community solidarity. Superior cultural values can make social attitudes closer (Rios et al., 2018; Bachrong & Ansar, 2021). This is related to the culture in Indonesia that is accumulated and cared for by the community. Local wisdom is influenced by the culture of each region so that the cultural diversity of local wisdom is different, and there are values of positive character formation in traditional games. (Lavega et al., 2018; Mungmachon, 2017). Superior local cultural values must be preserved and seen as cultural and social heritage (Ursache, 2015; Bahri et al., 2021). One way to preserve local wisdom is to play traditional games. Traditional games are also related to one of the subjects, namely mathematics with building materials.

Learning mathematics in elementary schools really helps hone logical, analytical, critical, and systematic thinking skills by improving the learning process (Saleh et al., 2018; Nurlaily et al., 2019). The mathematical aspects of this game are: 1) practice of number recognition and counting. 2) introduction of data structures on the engklek plot. In learning at school, the engklek game is very suitable for children's growth and development and hone their talents when playing with stones and maintaining balance. Mathematics requires soft skills and perspective to solve problems (Hendriana et al., 2018; Ambussaidi & Yang, 2019; Lin et al., 2020). One of the materials in mathematics is the material for the nets of cubes and blocks. In solving complex material, efforts are needed to develop creativity in learning mathematics by integrating a model of developing creativity in mathematics's teaching and learning process. The teacher's learning model is to carry out the teaching and learning process with all the facilities used directly and indirectly. PBL is a learning model that encourages students to know how to learn and interact in groups to find solutions to problems in life (Ariandi, 2016; García-Merino et al., 2020).

Characteristics of students are aspects of student experience background that affect the effectiveness of the learning process. The effectiveness of mixed learning may depend on many other factors, including student characteristics, design features, and learning outcomes (Jeynes, 2019; Kintu et al., 2017). The characteristics of students have a considerable influence on student perceptions, student motivation, and have a significant effect on learning (Kleij, 2019; Lavasani & Khandan, 2011). Student characteristics, such as gender, race/ethnicity, and anxiety levels, have been shown to influence student academic development (Cooper et al., 2018; Quinlan, 2016). Student characteristics are critical to student engagement, and teachers need to monitor student engagement and draw conclusions about underlying student characteristics (Manubey et al., 2021; Seidel et al., 2021). Therefore, teachers need to know or understand the characteristics of students to design appropriate and practical learning.

Education related to local culture must be carried out from an early age in an essential educational environment. Education has a very important role for the progress of a country (Johnes et al., 2017). Education is a process to change every individual for the better (Stukalova, 2017). Education can be said to be the key to student success because in education students can be more literate with the outside world and become the spearhead in developing resources and changing the behavior of each individual (Joarder et al., 2020). Traditional games are practical and fun media in carrying out culture-based character education (Lavega et al., 2018; Chivandikwa, 2019). Traditional games can introduce the nation's culture and increase love for heritage and noble values. Engklek or Sunda Manda, Inkling, Jlong Jing, Piring, or Dampu are traditional games that are widely available in Indonesia. The crank game can be a creative material for students in mathematics.

1.2. Related Research

This study is in line with research conducted by (Jack & Lin, 2017; Kwarikunda et al., 2020; Swirski et al., 2018) on student interests. However, previous research did not link students' interest with mathematical process skills in elementary school. In addition, it also did not carry out some of the tests carried out in this study, one of which was the correlation test, and the indicators used were limited. The correlation test conducted in this study determines the ability to solve problems closely with students' beliefs about the problem because students' beliefs in solving problems will affect student learning outcomes. This research is also in line with research conducted by (Kruit et al., 2018; Labouta et al., 2018; Mutlu, 2020) on process skills. It's just that this study does not use many variables tested as in this study using eight indicators so that this research is more accurate and more detailed.

Researchers are interested in examining the relationship between traditional games and learning in elementary schools to increase students' interest and process skills in learning mathematics. This is in line with previous research conducted by (Lavega et al., 2018). This research discusses the problem-solving abilities of students with the help of traditional engklek games. However, this research is still limited to quantitative data, while the research that the researchers conducted used quantitative data from questionnaires and qualitative data in the form of interviews and observation sheets for students and teachers at the school level. Similar research has also been carried out by (Febriyanti et al., 2018), where this study discusses what mathematical elements are contained in the engklek game.

The background of the history of traditional games with previous research shows that games have always been an important part of human life and social life. Various games have emerged in various countries, games can be created through the culture and climate of a country (Dehkordi, 2017; Junaedah et al., 2020). Based on research conducted by (Parrondo et al., 2021; Perrotte et al., 2020) stated that traditional games can be used as a lesson to train children's ability to act. The traditional engklek game can also be used as a training tool for students to concentrate. Concentration that can be contributed to mathematics lessons because mathematics is one of the subjects that requires a high level of concentration. In addition to being a tool that trains students to concentrate, traditional engklek games can be used as a means to introduce the culture that exists in a country.

1.3. Purpose of the Study

This research aimed to integrate local wisdom in the form of traditional engklek games to problem-solving-based mathematics learning at the elementary school level. In addition, students can socialize with friends while playing, fostering a sense of togetherness and joy. Based on the objectives that have been described, the formulation of the research problem is

1. How is the comparison between students' interest in grades IV A and IV B in the engklek game to mathematics in public elementary schools?

2. How do students' process skills in grades IV A and IV B in the engklek game compare to mathematics in public elementary schools?

3. How is the relationship between interest and process skills of grade IV A and IV B students in the engklek game on mathematics subjects in State Elementary Schools?

2.0 Method and Material

2.1 Research Model

This research uses mixed-method research with an explanatory design. Mix method research combines quantitative research methods and qualitative research methods (Morse & Niehaus, 2016). From a methodological point of view, this mixed-method has been developed from a simple research design to a complex framework with three existing paradigms: dialectical attitude, critical realism, and pragmatism. (Schoonenboom, 2019). The explanatory design is carried out in several stages of research, starting with data collection, analyzing data, formulating quantitative analysis results, then proceeding with data collection, analyzing and formulating qualitative data, and interpreting the research results. (Creswell, 2012).

This research was conducted at the State Elementary School, Muara Bulian District, Batanghari Regency. The time of the study was carried out in January 2021. The sampling technique used was purposive sampling because not all samples met the criteria expected by the researcher. The criteria in question are students who study mathematics in class IV A and class IV B at the Elementary School.

2.2. Participants

The sample of this study was public elementary school students in the Muara Bulian sub-district, Batanghari district, which was taken using a purposive sampling technique with a total sample of 80 students. Purposive sampling is a sampling technique based on the researcher's criteria (Sarstedt et al., 2018). The criteria that the researchers set were students who studied mathematics in class IV A and class IV B in SD Negeri Muara Bulian District, Batanghari Regency.

2.3. Data Collection

The instruments used in this study were questionnaires, observation sheets, and interviews, where the questionnaire used was adapted from the research (Astalini & Kurniawan, 2019), observation sheet adopted from research (Darmaji et al., 2019), and interviews were conducted with teachers and students. The indicators used for the interest questionnaire are attention in learning, student involvement, feelings of pleasure, and curiosity. At the same time, the indicators used for the process skills observation sheet are observation, communication, classification, and measuring. The approach used is problem-based learning, wherein in this approach, the teacher acts as a facilitator in learning integrated with the traditional engklek game. The role of a teacher referred to here starts from a teacher providing problems to solve, guiding and directing students to collect sources of information about the problems presented, and finally evaluating and helping students conclude how to solve the problems presented earlier.

2.4 Data Collection Process

This research procedure started from preparing an interest questionnaire, process skill observation sheets to be distributed to elementary school students, and preparing interview questions for elementary school students and teachers in the Batanghari district. The next stage is to apply for an observation permit to the intended school. After obtaining permission, the researcher distributes questionnaires, observation sheets and conducts interviews with students and teachers at the school. From the questionnaire results, observation sheets, and interviews, the quantitative data from the questionnaires and observation sheets will be tested to get the test results, and the qualitative data from the interviews are analyzed to conclude. Finally, after getting test results from quantitative data and conclusions from qualitative data, they connect the two to get an overall conclusion.

2.5. Data Analysis

This study using quantitative data analysis with the help of SPSS 26 to find descriptive statistics. Descriptive statistics are descriptions or presentations of large numbers, in the form of a summary of frequencies, for example, average, maximum and minimum. Then proceed with conducting interviews to strengthen the results of quantitative data. In this study, before testing the hypothesis, a prerequisite test was first carried out. Prerequisite tests carried out in this study were normality test, linearity test, and homogeneity test. The data is said to be normal if the sig value > 0.05, the data is said to be linear if the Sig value < 0.05, and the data is said to be homogeneous if the Sig value > 0.05. then after the prerequisite test, the hypothesis test can be carried out, the T-test and the correlation test can be carried out (Ernawati et al., 2021). The data was carried out based on Miles and Huberman, namely data collection with data analysis. Data reduction is an effort to collect data, then sort the data into units of certain data concepts and themes. In this case, the researcher will choose the main things, focus on the critical things, and look for patterns. Qualitative data analysis is carried out interactively and continues until it is finished so that the data is saturated.

3. Results

The following describes the results of descriptive statistics on students' interest and process skills variables in the engklek game on mathematics subjects, where the results will be obtained from the distribution of questionnaires.

Table. 1 *Descriptive statistics of students' interest in the engklek game on mathematics subjects with indicators of attention in learning*

Class	Interval	F	%	Category	Mean	Median	Min	Max
	4.0-7.2	0	0	Very Not Good				
	7.3-10.4	1	2.5	Not Good				
IV A	10.5-13.6	11	27.5	Enough	14.8	15.0	8.0	18.0
	13.7-16.8	16	40.0	Good				
	16.9-20.0	12	30.0	Very Good				
	4.0-7.2	0	0	Very Not Good				
	7.3-10.4	1	2.5	Not Good				
IV B	10.5-13.6	9	22.5	Enough	15.7	16.5	8.0	20.0
	13.7-16.8	10	25.0	Good				
	16.9-20.0	20	50.0	Very Good				

Based on table 1, students' interest in mathematics subjects on the indicator of attention in learning in class IV A is prominent in the good category with a percentage of 40.0%, while class IV B is prominent in the good category with a percentage of 50.0%.

Table.2 *Descriptive statistics of students' interest in the engklek game on mathematics subjects with indicators of student involvement*

Class	Interval	F	%	Category	Mean	Median	Min	Max
	5-9	1	2.5	Very Not Good				
	10-13	1	2.5	Not Good				
IV A	14-17	15	37.5	Enough	17.9	18.0	6.0	23.0
	18-21	19	47.5	Good				
	22-25	4	10.0	Very Good				
	5-9	0	0	Very Not Good				
	10-13	2	5.0	Not Good				
IV B	14-17	11	27.5	Enough	18.6	19.0	13.0	24.0
	18-21	22	55.0	Good				
	22-25	5	12.5	Very Good				

Based on table 2, students' interest in mathematics subjects on the indicator of student involvement in class IV A is prominent in the good category with 47.5%, while in class IV B, the prominent category is in the good category with a percentage of 55.0%.

Table.3 *Descriptive statistics of students' interest in the engklek game on mathematics subjects with indicators of feeling happy*

Class	Interval	F	%	Category	Mean	Median	Min	Max
	5-9	0	0	Very Not Good				
	10-13	2	5.0	Not Good				
IV A	14-17	6	15.0	Enough	19.3	20.0	13.0	24.0
	18-21	22	55.0	Good				
	22-25	10	25.0	Very Good				
	5-9	0	0	Very Not Good				
	10-13	2	5.0	Not Good				
IV B	14-17	8	20.0	Enough	19.2	19.0	13.0	24.0
	18-21	23	57.5	Good				
	22-25	7	17.5	Very Good				

Based on table 3, students' interest in mathematics subjects on the indicator of feeling happy in class IV A is prominent in the good category with 55.0%, while class IV B is prominent in the good category with a percentage of 57.5%.

Table.4 *Descriptive statistics of students' interest in the engklek game on mathematics subjects with indicators of curiosity*

Class	Interval	F	%	Category	Mean	Median	Min	Max
	5-9	0	0	Very Not Good				
IV A	10-13	1	2.5	Not Good	19.5	20.0	13.0	25.0
	14-17	7	17.5	Enough				
	18-21	22	55.0	Good				

Class	Interval	F	%	Category				
	22-25	10	25.0	Very Good				
	5-9	0	0	Very Not Good				
	10-13	6	15.0	Not Good				
IV B	14-17	9	22.5	Enough	18.0	18.0	12.0	24.0
	18-21	18	45.0	Good				
	22-25	7	17.5	Very Good				

Based on table 4, students' interest in mathematics subjects in the indicator of student involvement in class IV A is prominent in the good category with a percentage of 55.0%, while in class IV B, the prominent category is in the good category with a percentage of 45.0%.

Table. 5 *Descriptive statistics of students' process skills in the engklek game on mathematics subjects on Communication Indicators*

Class	Interval	F	%	Category	Mean	Med	Min	Max
	4.0-7.2	0	0	Very not good				
	7.3-10.4	0	0	Not good				
IV A	10.5-13.6	11	17.5	Enough	14.8	15.0	11.0	19.0
	13.7-16.8	21	52.5	Good				
	16.9-20.0	8	20.0	Very good				
	4.0-7.2	0	0	Very not good				
	7.3-10.4	3	7.5	Not good				
IV B	10.5-13.6	9	22.5	Enough	14.5	14.5	10.0	20.0
	13.7-16.8	23	57.5	Good				
	16.9-20.0	5	12.5	Very good				

Based on table 5, students' process skills towards mathematics subjects on communication indicators in class IV A are the most prominent in the good category with 52.5%, while class IV B is the most prominent in the good category with a percentage of 57.5%.

Table.6 *Descriptive statistics of students' process skills in the engklek game on mathematics subjects on the Indicator of obtaining and processing data*

Class	Interval	F	%	Category	Mean	Med	Min	Max
	4.0-7.2	0	0	Very not good				
	7.3-10.4	0	0	Not good				
IV A	10.5-13.6	13	32.5	Enough	14.4	14.0	11.0	19.0
	13.7-16.8	21	52.5	Good				
	16.9-20.0	6	15.0	Very good				
	4.0-7.2	0	0	Very not good				
	7.3-10.4	0	0	Not good				
IV B	10.5-13.6	10	25.0	Enough	14.9	14.5	10.0	20.0
	13.7-16.8	20	50.0	Good				
	16.9-20.0	10	25.0	Very good				

Based on table 6, students' processing skills on mathematics subjects on the indicators of obtaining and processing data in class IV A are the most prominent in the good category with a percentage of 52.5%, while class IV B is the most prominent in the good category with a percentage of 50%.

Table.7 *Descriptive statistics of students' process skills in the engklek game on mathematics subjects on Indicators of making hypotheses*

Class	Interval	F	%	Category	Mean	Med	Min	Max
	4.0-7.2	0	0	Very not good				
	7.3-10.4	0	0	Not good				
IV A	10.5-13.6	7	17.5	Enough	15.4	15.0	11.0	20.0
	13.7-16.8	22	55.0	Good				
	16.9-20.0	11	27.5	Very good				
	4.0-7.2	0	0	Very not good				
	7.3-10.4	2	5.0	Not good				
IV B	10.5-13.6	7	27.5	Enough	15.1	15.0	9.0	20.0
	13.7-16.8	20	50.0	Good				
	16.9-20.0	11	27.5	Very good				

Based on table 7, students' process skills towards mathematics subjects on making hypotheses in class IV A are the most prominent in the good category with a percentage of 55%, while class IV B is the most prominent in the good category with a percentage of 25%.

Table. 8 *Descriptive statistics of students' process skills in the engklek game on mathematics subjects on the Indicator of doing Experiments*

Class	Interval	F	%	Category	Mean	Med	Min	Max
	4.0-7.2	0	0	Very not good				
	7.3-10.4	0	0	Not good				
IV A	10.5-13.6	15	37.5	Enough	14.8	15.0	11.0	19.0
	13.7-16.8	18	45.0	Good				
	16.9-20.0	7	17.5	Very good				
	4.0-7.2	0	0	Very not good				
	7.3-10.4	1	2.5	Not good				
IV B	10.5-13.6	9	22.5	Enough	15.3	15.0	10.0	20.0
	13.7-16.8	17	42.5	Good				
	16.9-20.0	13	32.5	Very good				

Based on table 8, students' process skills towards mathematics subjects on the indicators of experimenting in class IV A are the most prominent in the good category with a percentage of 45%, while class IV B is the most prominent in the good category with a percentage of 24.5%.

In this hypothesis test, the tests carried out are the T-test and correlation test. The T-test aims to determine whether the independent variable affects the dependent variable, while the correlation test determines the relationship between students' interests and process skills.

Table. 9 *Description of the T-test of students' interest and process skills in the engklek game on mathematics subjects*

Class	Variable	N	Sig. (2-tailed)
IV A	Interest	40	0.033
	Student process skills	40	0.032
IV B	Interest	40	0.047
	Student process skills	40	0.044

Based on table 9, the T-test of students' interest and process skills in the engklek game on mathematics subjects in grades IV A and IV B obtained sig. < 0.05 then there is a comparison between learning interest and process skills of students in grades IV A and IV B.

Table. 10 *Description of the correlation test and student process skills in the engklek game on mathematics subjects*

Variable	N	Pearson Correlation	Sig. (2-tailed)
Interest	80	0.761	0.033
Science process skills	80	0.752	0.034

Based on table 10, the correlation test between students' interest and process skills in the engklek game on mathematics subjects in grades IV A and IV B obtained sig. < 0.05, then there is a relationship between students' learning interest and process skills in grades IV A and IV B.

Results of Observations and Interviews at State Elementary Schools

Interviews were conducted with subject 1, namely the homeroom teacher of class IV State Elementary Schools. He said that there was no integration of traditional games in learning in elementary schools. This is supported by the results of observations made by researchers that there is no use of traditional games as a learning resource. In the learning process, he only uses the lecture method to convey material to students. The teacher hopes to integrate traditional games with learning to make learning more exciting and make students more enthusiastic in learning. Not only that, but it can also introduce and preserve traditional games in their respective regions.

Interviews were also conducted on subject 2, namely elementary school teachers. He said that there was much local wisdom in the local area, especially about traditional games. He knew several traditional games he had played, such as stilts, humpback, pedestal, ankle, hide and seek, and others. Belaui also said that many positive values should be instilled in the younger generation in this traditional game. The hope is that the culture of the Indonesian nation will not fade, and the government's hope can continue to preserve this culture so that the nation's children can recognize the diversity of Indonesian culture.

4. Discussion

Data processing uses descriptive statistics, namely statistics used to describe or analyze a research statistic (Bazvand et al., 2018). Descriptive statistical test results obtained based on table 1, students' interest in mathematics subjects on indicators of attention in learning in SD Negeri, class IV A stands out in the good category with a percentage of 40.0%, while class IV B stands out in the good category with a percentage of 50, 0%. So it can be concluded that class IV B is superior to IV A on the indicators of attention in learning. In table 2 students' interest in learning mathematics is an indicator of student involvement in grade IV A Public Elementary School which stands out in the good category with a percentage of 47.5%, while in grade IV B stands out in good. category with a percentage of 55.0%. So it can be concluded that class IV B is superior to IV A on the indicators of student involvement.

Furthermore, based on table 3, students' interest in mathematics subjects on the indicator of pleasure in class IV A of Public Elementary Schools stands out in the good category with a percentage of 55.0%, while class IV B stands out in the good category with a percentage of 57.5%. so it can be concluded that class IV B is superior to class IV A on the indicator of feeling happy. Furthermore, based on table 4 students' interest in mathematics subjects on indicators of student involvement in SD

Negeri class IV A which stands out in the good category with a percentage of 55.0%, while in class IV B, stands out in the good category with a percentage of 45.0%. So it can be concluded that class IV A is superior to class IV B on indicators of student involvement.

Based on table 5, students' process skills towards mathematics subjects on communication indicators in SD Negeri class IV A are most prominent in the good category with a percentage of 52.5%, while class IV B is most prominent in the good category. category with a percentage of 57.5%. So it can be concluded that class IV B is superior to IV A in communication indicators. In table 6, students' processing skills in mathematics subjects on the indicators of obtaining and processing data in grade IV A SD Negeri are the most prominent in the good category with a percentage of 52.5%, while grade IV B is the most prominent in the good category with a percentage of 50%. So it can be concluded that class IV B is superior to class IV A in obtaining and processing indicator data. Furthermore, based on table 7 students' process skills towards mathematics subjects on indicators of making hypotheses in public elementary schools, class IV A is most prominent in the good category with a percentage of 55%, while class IV B is most prominent in the good category with a percentage of 25%. So it can be concluded that class IV B is superior to IV A in the indicators of making hypotheses. Furthermore, based on table 8, students' process skills in mathematics subjects on communication indicators in SD Negeri class IV A are most prominent in the good category with a percentage of 45%, while class IV B is the most prominent in the good category with a percentage of 24.5%. Therefore, it can be concluded that class IV B is superior to IV A on the indicators of experimental implementation.

Furthermore, the T-test serves to determine the comparison of interest and process skills of students in grades IV A and IV B in the engklek game in mathematics. Based on table 9, the t-test of students' interest and process skills in the engklek game in mathematics subjects at SD Negeri classes IV A and IV B obtained sig. In class IV A the interest variable is 0.033 and the process skill variable is 0.032. in class IV B for the interest variable is 0.047 and the process skills variable is 0.04. < 0.05 then there is a comparison of interest in learning with the process skills of students in grades IV A and IV B. Furthermore, a correlation test where correlation is carried out to determine the relationship between two variables (Li et al., 2021). Based on table 10, the correlation test between students' interest and process skills in the engklek game in mathematics subjects at SD Negeri class IV A and IV B obtained a sig value. Interest indicators are 0.033, and process skills indicators are 0.034. It can be seen that the results obtained are <0.05, so there is a relationship between interest in learning and the process skills of students in grades IV A and IV B.

Based on the results of interviews conducted with informants, namely State Elementary School teachers. The results obtained by the researchers found that there was no implementation of traditional games into learning. Because it has not been included in the elementary school curriculum, the informants fully support implementing this traditional game, including in learning. In addition to teaching materials in elementary schools, this can also preserve the culture of the Indonesian nation so that its existence does not fade. In this study, the traditional engklek game was very influential on students. Implementing an integrated thematic approach in character education can be done by adopting several parts of local cultural values used as teaching materials. Thus, an integrated thematic approach in character education can be made (Implementation is carried out by adopting some parts of local cultural values used as teaching materials). Without realizing it, traditional games are valuable for children if they can be implemented in learning activities. Organizing traditional games is one way to introduce elements of socio-cultural values and traditions of early childhood learning activities.

Without us realizing it in everyday life, many mathematical concepts are used, and we have applied them.

The benefits of this research are a) In the engklek game, children are able to foster the spirit of creativity and intelligence of children; b) traditional games combined with learning will create an atmosphere in learning that is more lively; c) Train motor development: able to balance the body, physical endurance, regulate energy and stamina, train the coordination of active body parts; d) increasing cognitive abilities: training concentration, increasing the ability to count and using numbers, increasing children's creativity in formulating strategies and problem solving; e) enhance personality development: increase development, self-esteem and self-confidence, foster a sense of sportsmanship, train empathy, and learn to make decisions

This study is in line with research conducted (Abbott, 2017; Jacob, 2018) whose conclusion states that student interest is indispensable in the learning process to improve students' skills in mathematics. In addition, the process skills variable is in line with research conducted by (Kurniawan et al., 2020; Pathoni et al., 2020) which states that process skills are needed by students to foster student interest in learning. learning done. However, previous studies did not link the differences and influences between the two variables with other differentiating indicators and factors as in this study. The purpose of this study was to determine whether there is a comparison and relationship between attitudes and interests with the science process skills of elementary school students in mathematics. The novelty of this research is to use the variables of students' interest and science process skills which are integrated with the traditional math engklek game at the elementary school level.

The novelty of this research is to know the comparison and relationship between students' interests and students' skills. there are rarely any studies that examine interest and process skills in traditional games at the elementary school level and to find out their contribution to research by knowing testing in two classes with various kinds of tests being carried out. In addition, this research is also useful to find out the benefits of traditional games, namely engklek at the elementary school level. So that this research can be known in more detail and accurately based on the tests that have been carried out by this research. One of the traditional games, namely the engklek game in mathematics, can train students to hone students' abilities (Chivandikwa et al., 2019).

This research implies that playing traditional games can increase students' interest and process skills in learning mathematics. Furthermore, this study found that student's interest in learning mathematics, which was carried out with the engklek game, was outstanding. This is very influential in growing interest and skills in the mathematics learning process (Musanna et al., 2017). Thus, learning mathematics that is implemented with an engklek game is very effective for elementary school students.

The limitation of this research is that it only uses interest and process skills variables but has not been tested with other variables. Where student motivation helps improve achievement outcomes, it is very important to become a benchmark for learning models applied in elementary schools for mathematics subjects. Researchers suggest to conduct further research to compare the variables of interest and student process skills with other variables..

5. Conclusion

Kamid, K., Rohati, R., Anggo, Septi, S. Azzahra, M. & Nawahdani (2021). Engklek Game" in mathematics: How difference and relationship student attitude towards science process skills? *Cypriot Journal of Educational Science*. *16*(6), 3109-3123. https://doi.org/10.18844/cjes.v16i6.6500

Based on the formulation of the problem in this study, the researchers concluded that there was a comparison of the interest of class IV A and IV B students in the engklek game on mathematics subjects in State Elementary Schools. In addition, there is a comparison of students' process skills in grades IV A and IV B in the engklek game on mathematics subjects in State Elementary Schools.

6. Recommendation

The researcher suggests doing other research with different variables, such as examining other traditional games to see if there are differences between traditional games between researchers and traditional games in other countries by comparing many variables such as integrating traditional games with learning outcomes and motivation in mathematics. The researcher recommends that further research be carried out at the elementary school level by comparing many variables to see the differences and existing effects.

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