



Improving Gross Motoric Skills Through Traditional Egrang Games Modif Group B

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Abstrak

Penelitian ini bertujuan untuk memperbaiki proses dan hasil pembelajaran sebagai upaya dalam meningkatkan perkembangan anak usia dini dalam kemampuan motorik kasar anak kelompok B di TK Negeri Pembina II Surabaya. Jenis dalam penelitian ini adalah penelitian tindakan kelas yang dilakukan dalam III siklus, subjek dalam penelitian ini adalah anak didik di kelompok B1 TK Negeri Pembina II Surabaya tahun ajaran 2022/2023 yang berjumlah 20 anak yang terdiri dari 6 laki-laki dan 14 perempuan. Pengumpulan data dilakukan melalui unjuk kerja, observasi dan dokumentasi. Teknik analisis data dilakukan dengan menggunakan dekriptif kualitatif, data di analisis secara kuantitatif dan kualitatif. Hasil penelitian ini menunjukkan bahwa kemampuan motorik kasar anak usia dini dapat ditingkatkan melalui permainan tradisional engrang. Peningkatan kemampuan motorik kasar anak secara keseluruhan dari 47,4% dengan kriteria masih berkembang di siklus I, menjadi 75% dengan kriteria berkembang secara harapan di siklus II, dan menjadi 93% dengan kriteria berkembang sangat baik di siklus III.

Abstract

This study aims to improve the process and learning outcomes as an effort to improve early childhood development in gross motor skills of group B children at Pembina II State Kindergarten in Surabaya. The type in this study was classroom action research conducted in cycle III, the subjects in this study were students in group B1 of TK Negeri Pembina II Surabaya for the 2022/2023 academic year, which consisted of 20 children consisting of 6 boys and 14 girls. Data collection is done through performance, observation and documentation. Data analysis techniques were carried out using descriptive qualitative, data were analyzed quantitatively and qualitatively. The results of this study indicate that gross motor skills of early childhood can be improved through traditional engrang games. The overall increase in gross motor skills of children from 47.4% with the criteria of still developing in cycle I, to 75% with the criteria of developing hope in cycle II, and to 93% with the criteria of developing very well in cycle III.

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Introduction

Children are individuals who experience a very significant development process from birth to the age of 6 years. Children have their own world and unique characteristics. As a

result, children are very active, dynamic, enthusiastic and always want to know what they see and hear and it seems they also never stop learning something new.

Early childhood education is coaching focused on early childhood (0-6 years) which is delivered through educational incentives to encourage physical and intellectual growth and development as referred to in National Education System Law No. 20 of 2003. that children with this law are ready to take basic education and the next stage of life.

One aspect that is seen in the growth and development of children is the aspect of motor development, because children can learn motor skills and interact with the environment. Movement is the primary way of expressing and communicating a child's motor needs. At this age children move very actively for their own satisfaction. This explains the research by Asmawi et al. (2017) in Malaysia "one aspect of child development that needs to be optimized from an early childhood is gross motor skill, because its existence to maximize growth and development of the child's body that further supports the optimization of another aspect of development". From this explanation it can be seen that one aspect of child development that is optimized is gross motor skills because it maximizes growth and development and other aspects support optimizing children's development in other aspects.

Aspects of gross motor development are covered with skills that require the coordination of most of the body and the development of body movements that use large muscles that are influenced by maturity (Rohendi, 2017) such as crawling, walking, running, jumping, throwing and squatting. Samsudin (in Adpriyadi, 2017) explains that the purpose of gross motoric development is to introduce and train gross and fine movements to improve physical skills and support a healthy lifestyle as well as healthy physical growth. This is due to gross motor development that is easily felt by the five senses.

According to (Fitriani & Adawiyah, 2018) physical development has primary (cephalocaudal) and proximal (proximodista) principles. According to the primers, growth is top-down because the brain grows rapidly before birth, with the baby's head coming out first and experiencing major disproportion. According to the proximal principle, motor growth and development occurs from the inside out, in the womb the head and trunk develop, then the arms and legs, then the hands and feet, finally the fingers and toes. In childhood, the limbs continue to grow faster. According to the proximodistal principle, growth and motor development from the inside out, in the womb the head and body develop before the arms

and legs, then the hands and feet, finally the fingers and toes. The limbs continue to grow faster than the hands and feet in early childhood.

Children who grow and develop without gross motor skills feel uncertain (insecure) when performing physical tasks and other skills. In connection with motor skills, according to Waharsono (in Hasanah, 2016) suggests that with increasing body size and increasing physical abilities, the development of movement abilities also increases. According to Mursid (in Hasanah, 2016) the characteristics of physical development in a recognizable way, namely:

1. Development of large muscles occurs fairly rapidly in the last 2 years of childhood. Some of the basic movements are jumping, running, throwing, catching and hitting.
2. Large muscle development, which occurs fairly quickly for strength in both boys and girls.
3. Legs and arms grow relatively faster than other body parts.
4. Coordination of body movements and balance increases.
5. The possibilities and opportunities to develop with various physical activities increase.

Table 1 Gross motor development aged 4 years - < 6 years

Development Scope	Level of Development Achievement	
	Age 4 - <5 years	Age 5 - <6 years
Rough motoric	<ol style="list-style-type: none"> 1. Mimicking the movement of tree animals in the wind, airplanes, etc. 2. Doing hanging movements (hanging) 3. Perform coordinated jumping, jumping, and running movements. 4. Throw something in a direction. 5. Catch something precisely. 6. Doing anticipatory movements 7. Kicking things in an directional manner. 8. Utilize game tools outside the classroom. 	<ol style="list-style-type: none"> 1. Perform coordinated body movements to train flexibility, balance, and agility. 2. Coordinate hand-foot-head movements in imitating dance or gymnastic movements. 3. Doing physical games with rules. 4. Skilled in using the right and left hands. 5. Carry out personal hygiene activities.

Source: Permendiknas No. 58 of 2009 dated 17 September 2009 concerning Early Childhood Education Standards. p. 8-9.

Activities that can be given to children to encourage motor and physical development at school are to link children's lives on the playground where play is a child's world that provides direct learning experiences. Playing is a joy that cannot be separated from children to adults. Playing can be used as entertainment and one of the playing activities is the activity most liked by children in all forms of play.

Vygotsky (in Turyani and Wondal, 2018) describes play as the main development in developing child development, in which children describe play situations according to their imagination and play children get maximum pleasure from following the rules of play. Like Vygotsky's emphasis on imagination, play offers children the opportunity to become imaginative rule makers and players. While playing, children also explore their imagination to create interesting and meaningful creative scenarios.

According to Ismail (2018) defines play as an activity that helps children develop their full potential physically, intellectually, socially, morally and digitally. It can be concluded that the game is a fun activity that is carried out by many children, which can shape the child's personality and help children achieve physical development that is balanced with the child's imagination, and becomes one of the interesting games in giving meaning.

Lots of games that can provide direct experience to children, one of which is traditional games. Today's traditional games can adapt to changing times and technological developments. As a result of rapid technological change, many traditional games have been forgotten and abandoned. This traditional game is known to have several advantages compared to today's modern games, namely winnowing and preserving the cultural heritage of the goose and the noble values contained in it, as well as arousing love for it (Pratiwi & Kristanto in Nurwahidah, et al. 2021). In today's modern games which are dominated by gadgets, children tend to just sit, while in traditional games children move more.

Traditional games can also train children's ability to read body movements, train children's dexterity and skills in games, improve communication skills and the ability to develop good strategies, express children's emotions and train children to study in groups. The children also seemed to actively develop their physical and motor skills so they could play with a happy heart.

One of the traditional games that can be combined with the 21st century era is the game of coconut shell engrang which is modified with the rules of the game applied. According to Mulyani (in Roftah, 2019) stilts with coconut shells have great benefits for children's development. Playing is one way to explore children's learning experiences in social life, besides that it also has advantages, including:

1. Preserving the nation's traditional sport crocodile.
2. Can develop various body functions, including:
 - a. Improve children's body balance while playing.
 - b. Coordination between eyes, hands and feet.
 - c. Train your child's fingers and toes.
 - d. Increase body stamina and hand strength.
 - e. Adds a sporty attitude when playing with friends.
 - f. Able to establish friendly relations and good cooperation.
 - g. Develop skills in applying strategies and techniques related to the game.

Based on the existing problems, it is necessary to conduct action research regarding "Improvement of gross motor skills through traditional engrang modif games in group B children at Pembina II State Kindergarten in Surabaya". The purpose of this research is to improve the gross motoric learning process of children through learning traditional games to improve monotonous gross motor skills to be more fun but still included in varied and modified learning.

The theoretical benefits obtained from this research activity are: The results of this study are expected to provide information for the development of scientific publications, especially on the Improvement of Group B Gross Motor Skills, as a basis for further research on gross motor relations in traditional stilts games. The practical benefits are: For teachers it can be used as input to improve learning methods in class as a provision for children ready to enter class. The results of this research are expected to have a positive impact on improving gross motor skills for educational institutions.

Method

The research used included Classroom Action Research (PTK), this research was based on the problems encountered in the learning activities of Group B children at Pembina II Public Kindergarten in Surabaya. This study used a Classroom Action Research (PTK) design, namely the Kemmis and Mc. Taggart, is a development of the basic concept introduced by Kurt Lewin.

The PTK study design basically consists of devices or threads, where a device consists of four components, namely: planning, action, observation and reflection. These four components form a chain that is seen as a cycle. This research was conducted using classroom action research methods and consisted of three cycles.

The subject and scope of this research was conducted at Pembina II Public Kindergarten in Surabaya for the 2022/2023 school year with the target of 20 children in Group B consisting of 6 boys and 14 girls.

The data collection steps used in this study are as follows:

1. Work method

Performance is the result of children's learning to complete tasks in action by demonstrating something that is assessed in the form of writing, products or attitudes.

In this study, the instruments used are:

- a. Child Ability Assessment Sheet

With the research sheet for children, the researcher only provided a checklist for the assessment sheet. There are 4 performance questions that will be assessed related to the ability to play stilts, namely:

- 1) Child can stand on stilts and walk in place.
- 2) Children can walk 5 straight steps on stilts.
- 3) Children can walk up to 5 steps in a zigzag pattern on stilts.
- 4) The child can walk along the step guide until it is finished.

2. Teacher observation

Observation is a method of gathering information through direct observation of attitudes, knowledge and skills. The instruments used in this observation technique use guidelines or observation sheets that contain a list of activities that can occur during observation.

The data analysis technique for testing the action hypothesis is a descriptive technique that compares game mastery (percentage receiving 3 stars and 4 stars) between the time before the action: Cycle I Activities, Cycle II Activities and Cycle III Activities. The formula for calculating the percentage of children who get 1 star, 2 stars, 3 stars and 4 stars :

$$P = \frac{f}{N} \times 100\%$$

(Sumber : Sudijono, 2006)

Information :

f = Frequency that is being sought percentage

N = Number of Cases (number of frequencies/number of individuals)

P = Percentage number

The results of these assessment points are then averaged from various research data sources and agreed in an assessment statement to determine the success of overall business development. Rating policies are requirements shown in the table below.

Table 2 Criteria for the Success Level of Child Development Achievements

No	Persentase	Criteria
1.	76%-100%	BSB (Very Well Developed)
2.	51%-75%	BSH (Thriving As Expected)
3.	26%-50%	MB (Start Developing)
4.	0-25%	BB (Undeveloped)

(Source: Devi, 2014)

Results and Discussion

The first step before the research is observation. Observations made in this study were observations made in February on learning activities, especially learning that develops gross motor physical skills in Group B Pembina II Public Kindergarten in Surabaya. Observations were made during teaching and learning activities. The learning implementation was very impressive, the children mastered more activities that required cognitive and fine motor skills, it was seen that the children in LKA often sat well in class. Children are not given the

opportunity to practice or develop gross motor skills, and this is only done as part of extracurricular activities.

Observations from the initial study showed that gross motor skills did not show good results when the initial action was carried out in cycle 1. It can be seen that children can stand on egrans and walk in place, children can walk 5 steps straight on stilts, children can walk up to 5 steps with a zig-zag pattern on stilts, and the child can walk along the guide steps to completion is 47.4%, which includes the criteria for still developing. The low motor skills of children are caused by the lack of opportunities for students to move and the lack of learning modifications related to gross motor games that can be completed by children aged 5-6 years. In this case, it can be explained in a summary of the criteria for acquiring children, which can be seen in graph 1.



Figure 1. Graph of Achievement of Gross Motor Ability Cycle I

From the results of these observations there are still many shortcomings that need to be done for improvement, it can be seen that 20 children at the first meeting were included in the criteria for starting to develop because the children were not used to and were not familiar with these traditional games so that children still needed guidance and demonstrations in the rules of how to play. play well and right. From the reflection results of Cycle I it is known that children's motor skills must be improved in order to achieve the expected level of success and development.

In the implementation of Cycle II activities various learning activities were carried out to provide children with fun but important learning for children's growth and development and hands-on playing experience, the researchers made several variations in this Cycle II stage and focused on activities that children need, which understands the importance of

balance and strength on coconut shell stilts while playing. The things that were prepared by the researchers were as follows: (1) the children were prepared to warm up first; (2) learn to walk on stairs with one step on one foot; (3) equating the movement of the hand with the rope pulling on the leg with the opportunity 3 to 5 times; (4) using different media than before, namely stilts clogs.

Observation of group B's gross motor skills in cycle II was carried out during morning class activities and was carried out in 2 meetings. After carrying out this research, there has been an increase in children's gross motor physical abilities which indeed focus more on balance so that children get used to walking on clogged stilts and achieve the expected success. The results of the increase from cycle II can be seen in graph 2.

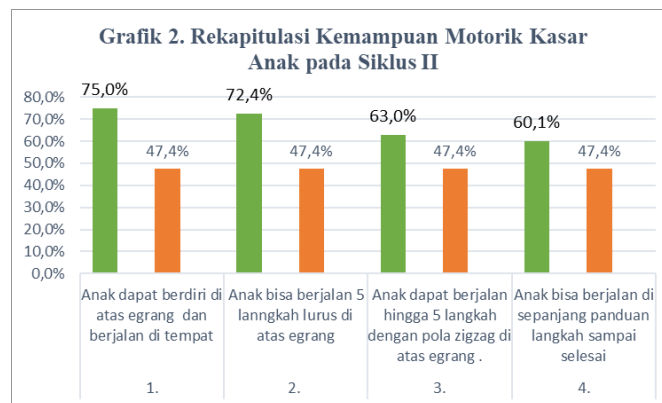


Figure 2. Graph of Achievement of Gross Motor Skills Cycle II

Information about achieving motor skills in cycle II Ability number 1 is as much as 75% with stars obtained by 17 children and stars 2 obtained by 3 children; Ability number 2 obtained is 72.4% with 3 stars from 15 children and 2 stars from 5 children; Ability number 3 reaches 63% of 4 stars from 1 child, 3 stars for 6 children and 2 stars for 13 children; Last ability number 4 received 60.1% of 4 stars from 1 child, 3 stars from 4 children, and 2 stars from 15 children . Based on the results above, playing with coconut shell stilts in the motor skills of all children was unsatisfactory and experienced obstacles. Which indeed in cycle II is still centered on getting used to children playing stilts clogs so that when children continue to step in games that have higher rules the child is able to do it independently without the help of the teacher, therefore researchers hope that cycle III will have an impact on action which is more significant in the development of children's gross motor skills in the clog stilts game.

The implementation of the actions in cycle III was more prepared than all planning to execution which would be implemented for children during morning class activities, because in cycle II the average child was able to walk on stilts so when playing in cycle III the researcher prepared The rules for moving are: (1) choosing a friend to play against; (2) getting ready to stand on the stilts; (3) walk following the direction of the steps placed on the floor to the finish.

The motor skills of group B1 children were observed in 3 sessions. And from the results of observations in cycle III it was found that children's motor skills Normal ability 1 of 93% was only 4 stars out of 12 children, 3 stars out of 7 children and 2 stars out of 1 child; Ability number 2 of 92%, only 4 stars from 11 children, 3 stars from 8 children, and 2 stars from 1 child; Ability numbers 3 and 4 to 90.8 only 4 stars for 11 children, 3 stars for 5 children, and 2 stars for 4 children and all abilities fall into the criteria of good or very well developed children. In this game, balance and coordination are the main keys to completing the stilts game. There were no children who fell and their bodies were straight, only 4 children whose bodies were not straight and straight. The researcher stopped the research in the third cycle because the action success criteria were met. In this case it can be explained by summarizing the criteria for acquiring children in graph 3.

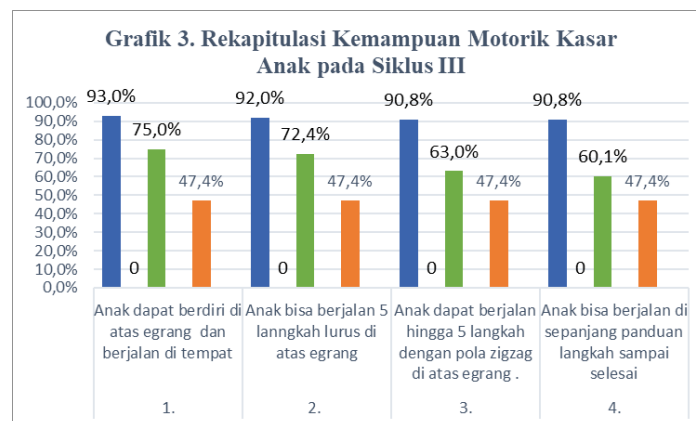


Figure 3. Graph of Achievement of Gross Motor Ability Cycle III

The third cycle of reflection was carried out by researchers and class teachers at the end of the third cycle. This reflection is related to the learning process that takes place during the activity. Children are very excited to learn because they feel this game is unique and challenged to play it, let alone managed with competitions or competitions so that children are more active in encouraging their friends, children are more expressive in expressing their

moods, children are more controlled and disciplined in game rules, and also children move more when stepping activities, maintaining balance and coordination between eyes, hands and feet when walking along the direction of the road signs to the end. Children's motor skills have increased and are considered good criteria at the age of 5 to 6 years.

By using research data in each cycle, the researcher found that children's gross motor skills in playing traditional media activities involving stilts made of coconut shells and clogs were still developing because they had never been used in schools to practice traditional games and learning and activities used to train gross motor skills of children. From the implementation of class actions carried out in group B at Pembina II Surabaya State Kindergarten which used 3 cycles in each class action. In the implementation of the first cycle using coconut shell stilts as media, the success rate was not achieved because the children were not used to and familiar with traditional games on stilts and children had difficulty maintaining balance to stand on coconut shell stilts and also had difficulty coordinating between eyes, hands and feet to move the rope in walking. Therefore, when conducting the second cycle of research, researchers carried out activities that were more interesting according to the children's interests and abilities. This is what researchers do to achieve success in developing motor skills and improve learning in the classroom so that it is more optimal in the future.

For implementation in the second action cycle, the researcher used a game of stilts with a different media, namely with clogs because the clogs have flat footstools and also an interesting shape, namely the shape of the feet painted in colors, where there are rules in the game, namely in pairs when walking zig-zag in 5 steps and the child who finishes first will get a reward.

In the action activities of cycle III the researcher made changes that were more complex than cycle II but still used the same media as the games in cycle II, the changes made in the game were the rules of play where children play games in pairs and walk on stilts by following the directions given. passed until the end of the game is over, with changes from previous activities, the implementation of cycle III increased significantly, including ability number 1 standing on stilts 93%, ability number 2 walking straight on stilts 92% and ability section number 3 walking zig-zag 90 The last .8% ability number 4 goes according to step instructions 90.8%. As expected, the success of the implementation of Cycle III was very

large so that the children were very enthusiastic in carrying out learning activities with the help of traditional stilts games that were never bored. Traditional games also provide advantages in the development of other aspects, such as the ability to manage games socially and emotionally because children have to wait their turn to play and children also encourage each other so that their friends can finish the game while playing. Traditional stilt games can also stimulate children's interest in learning, so that children want to learn.

This is in accordance with the opinion expressed by Musbikin (in Haryanti and Asrul, 2021) that children's motor development is a process where children can learn and use all existing skills so that children can develop optimally according to their age. Many children's abilities, such as the ability to think, speak (communicate), socialize, and move, are still hidden because usually there are three stages of early childhood motor development, namely cognitive, associative, and autonomic stages.

In the opinion of Fad (in Jumriati, 2022) In traditional games, there is a type of game that has a deep meaning not only because of the socialization effect, but also because of the turmoil of parental love, love for the environment and empathy for friends. Based on the results of all studies that improve children's gross motor skills, it can be done by modifying traditional games, namely the game of coconut shell stilts and clogs, which initially experience difficulty until they get used to it and can be used as competition in simple games.

Conclusion

The results of the implementation of class activities carried out in group B of TK Negeri Pembina II Surabaya which aims to develop children's motor skills through learning traditional games can be seen from the results of their implementation, in the three cycles of action, namely in the implementation of cycle I, the observation results were obtained in the form of ability no 1 of 47, 4% with the criteria of being able to develop, to 75% in the second cycle with the criteria of developing according to expectations, and to 93% in the third cycle with the criteria of very good development. Ability number 2 in cycle I got 47.4% with the criteria of being able to develop, to 72.4% in cycle II with the criteria of developing as expected, and to 92% in cycle III with very good development criteria. ability number 3 in cycle I got 47.4% with the criteria of being able to develop, to 63% with the criteria of developing according to expectations and to 90.8% in cycle III with the criteria of very good development. Ability number 4 gets 47.4% in cycle I with criteria of being able to develop, to

60.1% with criteria of developing according to expectations and to 90.8% in cycle III with criteria of very good development.

This allows the child to maintain a balanced posture and with eye, hand and foot coordination, can prevent his body from falling. The results of the study showed that the gross motor skills of the B1 group at Pembina II Surabaya Public Kindergarten could be improved through playing on stilts.

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