

## ***ANALYSIS OF FINE MOTOR SKILLS BY USING A CREATIVE ART MODEL AND COLORING ACTIVITIES IN GROUP B OF AR-ROZAK KINDERGARTEN***

<sup>1</sup>Lola Wita Harahap

<sup>1</sup>Pascasarjana Konsentrasi PAUD, Universitas Negeri Medan, Jl. Willem Iskandar Medan, Sumatera Utara, Indonesia

<sup>a)</sup>E-mail: [ollazainal14@gmail.com](mailto:ollazainal14@gmail.com)

**Abstract.** The problem in this study is the low level of fine motor ability of the child in terms of folding, cutting according to the pattern, arranging the toys of building construction, and coloring more neatly and not out of line. This study aims to improve fine motor skills by using creative art models and coloring activities in the group B of Ar-Rozak Kindergarten. This research is a quantitative descriptive study. Subject of this research is student of Group B and object of research is fine motor ability by using creative art model and coloring activity. Methods of data collection used were observation, interview, and documentation. The results showed that fine motor skills through activities in students of Kindergarten of Group B were belonging to category of very good. The data obtained showed that the fine motor skills of the students of Group B of Ar-Rozak Kindergarten were 88.4%.

**Keywords:** Creative Art Model, Coloring, Fine Motor Ability

### **1. Introduction**

Kindergarten is one of the institutions of Early Childhood Education. Upon entering Kindergarten, the children get a greater chance to play with their peers (Tedjasaputra, 2005: 17). Children will learn to socialize and develop their ability. As one of the institutions of Early Childhood Education that is on the formal track, Kindergarten is expected to be able to assist students in developing various potentials of children both psychic and physical, including motor skills. Physical-motor development is one of the developments of basic skills in Kindergarten. Activities of motor physical development include activities that lead to the development of gross and fine motor of

the child. Activities carried out are, among others, in the form of running, walking, cutting, drawing, writing, painting, and so forth.

Physical activity is one of the important media because through this media the children make an impression about himself and his environment (Montolalu, 2009: 32). Physical activity carried out continuously and sustainably will be able to develop the motor skills of children. Montolalu (2009: 33) suggests that movement skills can be learned when children are healthy, excited, and happy, have the opportunity to try, have the freedom to explore, and gain satisfaction and encouragement from adults. Therefore, the role of educators to develop children's skills, especially in motor skills is very important. Educators should also be able to create a fun atmosphere for learning, understanding the child's psychological condition, and creating a comfortable climate for learning.

Motor development is a development in controlling body movements through coordinated activities between the central nervous system and muscles (Widodo, et al, 2002: 39). The motor development of children is divided into two, namely the development of gross motor and fine motor development. Inculcating true motor skills and their optimal development is one of the main tasks and functions of education in Kindergarten (Samsudin, 2008: 23). The activities and learning of motion by students of Kindergarten become very important and should receive special attention. Children who have good motor skills will more easily adjust to the environment.

Motor skills can also affect the child's independence and confidence in doing something or because he is aware of his ability. Inculcating true motor skills is very important, because it will greatly contribute to the needs of children (Samsudin, 2008: 20). Motor skills are a person's ability to perform coordinated movements using a combination of various muscle actions. Gross motor skills tend to be performed by large muscles and produce greater body movements such as running and jumping. Fine motor skills tend to be performed by smaller muscles that result in actions such as writing or removing bottle caps (Widodo, et al 2002: 34).

Children of Kindergarten are expected to have mastered some skills that require fine motor skills, such as using scissors well although not straight in cutting, folding paper, inserting threads into needles, tying shoelaces, dyeing neatly, and others. In accordance with the fine motor development that must be achieved, then the activities undertaken in early childhood should be directed to improve their skills in these matters. This is very important because only chance and continuous training that will be able to improve children skills in doing activities that require fine motor movement (Sujiono, 2009: 27).

Educators should also motivate children to be more eager to practice and conduct learning activities. Motivation is a source of energy for a person to get excited (Soenarno, 2006: 15). By motivating the child to do the activities, the educator has helped the children to be eager to do the activities. The activity of fine motor development of the child aims to train the motor coordination ability of the child. Coordination between the hands and the eyes can be developed, among others, through the activities of drawing, coloring, cutting, painting, and sticking.

In coloring activities, some children are able to color properly, but others do not want to continue their work to color. Most of the results of their coloring do not yet tidy and look dirty. The child prefers to chat with his or her friends rather than doing the tasks assigned by the teacher. To develop fine motor skills as well as to tackle the child's boredom, teachers need to provide other interesting activities so that children can learn with eagerness. One of the activities that can be done to develop fine motor skills of children is to apply creative art model.

Creative art is an activity that actively involves the child's imagination through the art of dance, art, drama or theater, puppets (wayang), and music. Creative arts involve children in all domains – cognitive, language, social, emotional, and physical (Mills, 2014: 1). Mayesky (2013) offers eight ways to assist teachers in encouraging children to express their natural creativity through art, including:

1. Help the child accept change. Fear and anxiety are the enemies of creativity.

2. Help children realize that some problems are not easy to solve.
3. Help the children recognize many problems with many possible answers. The goal is to explore and discover.
4. Help the child monitor and accept their own feelings.
5. The value of children's creativity, even when it is messy.
6. Know and recognize the happiness of children in all things as a way of creative thinking.
7. Help children appreciate their own unique characteristics.
8. Help children persevere.

Early childhood educators can apply these theories. For example, teachers can offer the opportunity to play creative art using regional dramatic games. As children engage in dramatic play, their level of imagination and creativity soar as they adopt certain roles associated with a particular character or individual. In addition, children build social skills as they experiment with creative arts such as puppets, creative movements, music, and dance according to dramatic scenarios. Similarly, the fine motor skills of the child can be enhanced by painting activities such as making drawings with paints, collage materials, and markers (Ginsburg 2007).

Children love to color through various media either when drawing or putting color when filling the areas of the image that should be dyed (Sukardi, et al, 2011: 7.4). Based on these statements, then the coloring activities are the fun activities for children. The fun here lies in the process of selecting the colors used to color an empty image area. This is in accordance with the opinion of Sumanto (2005: 65) that creativity that can be developed in coloring activities for kindergarten children is the freedom to choose and combine elements of color on objects that colored as desired by the child. The purpose of the coloring activity is to train the movement of the wrist (Sujiono, 2008: 2.12).

Coloring in early childhood aims to train skills, neatness and patience (Sukardi, et al, 2011: 7.28). Skills derived from the ability of children to treat the hands are done repeatedly so that over time the child can control and direct his or her

hands as desired. Tidiness is seen from how children color in places that have been determined, and over time the child will be more skilled to scratch the coloring media because it is used. Patience is obtained through the activity of selecting and determining the right composition according to the child's opinion of how many colors are used to determine the color composition. Continued efforts will train the child's patience.

Preschoolers also love to participate in light movement activities such as drawing, coloring, painting, chopping, and sticking (Morrison, 2012: 221). Pre-school children here include children of group B that is aged 5-6 years who should love the coloring activity using a variety of materials. Picture coloring activities are activities performed using various media such as crayons, markers, colored pencils and food coloring. The image to be colored matches the theme currently used in kindergarten. To achieve good fine motor skills the educator must provide stimulation to the child to support the achievement of optimal fine motor skills. Individuals who get direct and regular stimulation will learn faster because they develop faster than those who do not get much stimulation (Izzaty, et al., 2005: 14).

Susanto (2011: 164) argues that fine motor is a smooth movement involving certain parts performed by small muscles only, because it does not require energy but requires careful coordination. In the opinion of Suyanto (2005: 50) fine motor development includes the development of smooth muscle and its function, this muscle serves to perform the movements of the parts of the body more specific.

Based on some opinions above can be concluded that the ability of fine motor skills require the skills of movement of small muscles in the body such as the skills to use the fingers of the hand, moving the wrist for flexure, and good coordination of the eyes and hands.

One aspect of motor is flexibility. According Juliantine (2007: 1) flexibility is one component of physical conditions that have an important role. Flexibility is the ability to perform motion in the range of motion of the joints. Flexibility is a necessary

prerequisite for displaying a skill that requires a wide range of motion and allows one to perform fast and agile movements.

The flexibility of a person usually describes one's agility in motion. In the world of children, flexibility is very important because the world of children is a world of play. Activities of play require agility and agility requires flexibility. Flexibility is also needed in fine motor activities, for example, when a child uses his fingers to do something. Flexibility in fine motor also requires coordination of the eyes and hands. With better coordination of the eyes and hands then the child can already take care of himself with parental supervision. Fine motor movements that can be seen when the child first entered the preschool age are, among others, brushing, combing, wearing their own shoes, buttoning clothes, and feeding themselves using spoons and forks (Sujiono, 2009: 12).

Sujiono (2009: 15) maintained that in doing fine motor movement, the child also needs the support of other physical skills as well as mental maturity, for example the skill of drawing. In drawing, in addition to requiring the skill of moving the fingers, the child also requires the cognitive ability that allows the formation of an image.

## **2. Method**

This research is a descriptive study using qualitative methods in data collection. The subjects of this study consisted of 2 teachers and 16 students of Ar-Rozak Kindergarten of Aek Loba Pekan. Technique of data collection is done by using observation, interview, and documentation. In descriptive method, researchers report the state of the objects or subjects under study in accordance with what it is. The purpose of descriptive research is to make description, representation, or painting systematically, factually, and accurately about facts, properties, and relationship between phenomena investigated (Nazir, 2003: 54). Data analysis was done by the researcher after collecting data from observation, and interviewing with teachers of Ar-Rozak Kindergarten. In this research, descriptive statistic technique is used for data analysis. According Sugiyono (2011: 147) descriptive statistics are used if the

researcher only describes the sample data and does not make conclusions that apply to the population from which the sample was taken. This explains that in this study the researcher only describes the sample data only.

### **3. Results and Discussion**

Based on the results of the observations conducted by the researcher, the coloring activities in Ar-Rozak Kindergarten of Aek Loba Week took place in the classroom. Teacher chooses the classroom so that the teacher can control the student in coloring the picture. Before the activity begins the teacher prepares the coloring equipment first. Paint for coloring activity is divided into 10 colors: red, green, blue, pink, brown, orange, purple, black and yellow. Each of paint is then placed on small bowls so that each child is free to choose what color they like to color the previously shared image. After that the teacher gives an example of how to color the image by attaching a colorless image on the board. The teacher gives an example of how to take the paint so that children do not take too much paint used for coloring. The teacher gives an example of how to color in a circle so that the child can fill the circle with the color paint with the color combination as the child wishes evenly and neatly with their fingers.

After the teacher explains the ways of coloring the picture, the child is asked to imitate the teacher's activity. When the child performs the activities of coloring the images, the teacher gives positive reinforcement to the child like "great", "extraordinary", or "good" and motivates them not to be disgusted in holding color paint with their fingers. The child who has finished the task then shows his work to the teacher. After that the teachers collect the work of children and give praise and reward to the children who successfully colored the picture neatly.

Based on interviews conducted with classroom teachers, the activities of coloring the images are held because these activities help the creativity of children and develop their fine motor skills because this activity is done directly with the child's fingers. In the picture coloring activity, the constraint that is often encountered by the teacher is

the willingness of the child to hold the color paint by using their fingers. To overcome these obstacles then the teacher always gives motivation to the child to not afraid of dirty because it touches the color paint, and do individual assistance to the child who does not want to color the image until the child is willing to perform activities.

The following is an analysis of the data as a result of observation of the implementation of the activity of coloring images assessed by the neatness and flexibility of the child's fingers in Ar-Rozak Kindergarten of Aek Loba Pekan.

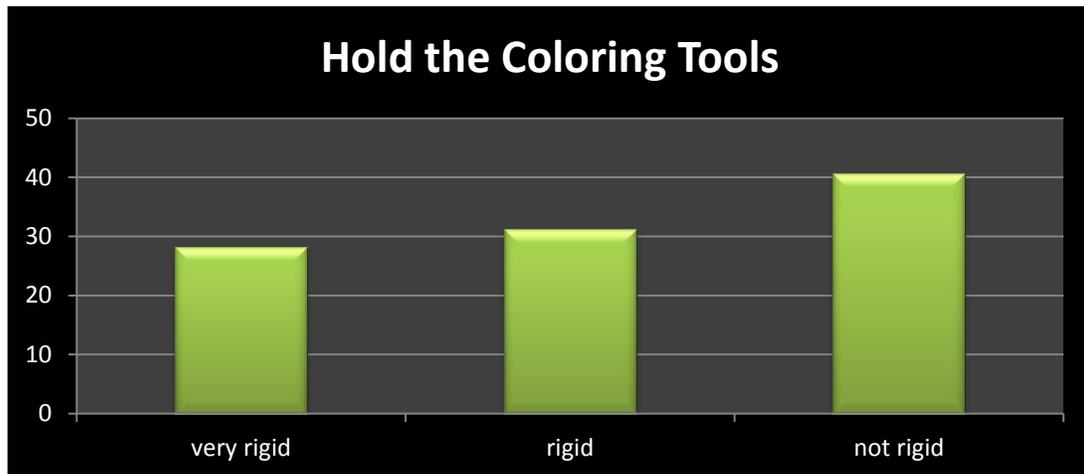
### 3.1 Holding the Coloring Equipment

Here is the percentage of ways in which students hold the coloring tools when performing activities of coloring the pictures in students of the group B of Ar-Rozak Kindergarten of Aek Loba Pekan. The following table is the results of the first and second observations made by the observer in the class.

**Table 1.** Percentage of Students by Way of Holding the Tools of Coloring

Category	Observation 1	Observation 2	Number	Percentage
Very Rigid	6	3	9	28.12%
Rigid	6	4	10	31.25%
Not Rigid	4	9	13	40.62%

Here is a histogram of percentage of ways in which students hold coloring tools while performing activities of coloring the images in the children of the group B of Ar-Rozak Kindergarten in Aek Loba Pekan.



**Figure 1.** Histogram of Students' Ability to Hold the Coloring Tools

Based on the histogram table above, it can be concluded about the percentage of students in holding the coloring tools in the coloring activity by using the creative art model in the students of Group B of Ar-Rozak Kindergarten in Aek Loba Pekan. It was found that 28.12% of 16 students have not been able to hold coloring tools well (very rigid), 31.25% students are not rigid to hold coloring tools, and 40.62% students can hold well tools coloring (not rigid).

### 3.2 Flexibility of Wrist / Fingers

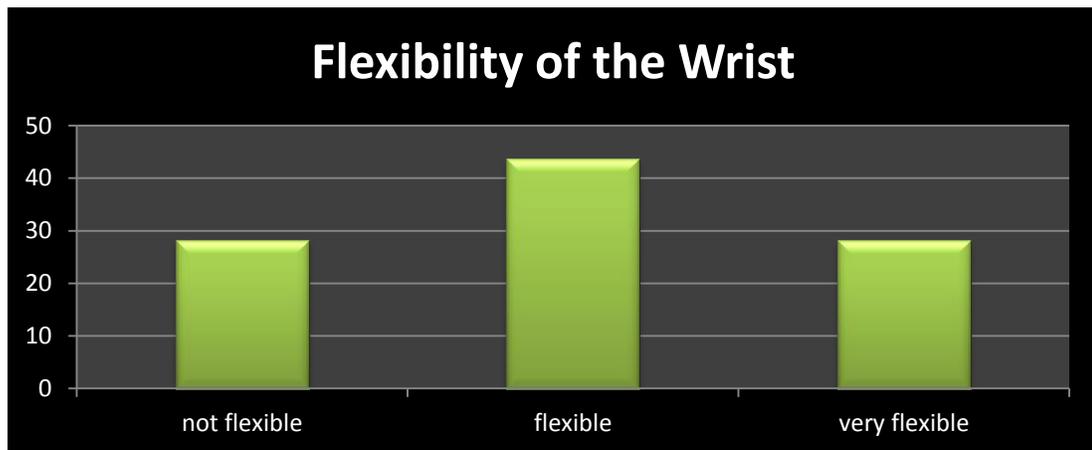
Here is the percentage of students by the flexibility of the wrist while performing activities of coloring the images in the students of the group B of Ar-Rozak Kindergarten in Aek Loba Pekan. The following table is the results of the first and second observations made by the observer in the class.

**Table 2.** Percentage of Students by the Flexibility of the Wrist / Fingers

Category	Observation 1	Observation 2	Number	Percentage
Not Flexible	7	2	9	28.12%
Flexible	6	8	14	43.75%

Very Flexible	3	6	9	28.12%
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Here is the histogram of the percentage of students by the flexibility of the wrist when performing activities of coloring the images in the students of the group B of Ar-Rozak Kindergarten in Aek Loba Pekan



Based on the histogram table above it can be concluded about the percentage of students by the flexibility of the wrist in the coloring activity using the creative art model in the students of Group B of Ar-Rozak Kindergarten in Aek Loba Pekan. It was found that 28.12% of 16 students were not flexible in coloring activity with very neat, 43.75% of students were flexible in picture coloring, and 28.12% very flexible in coloring activity.

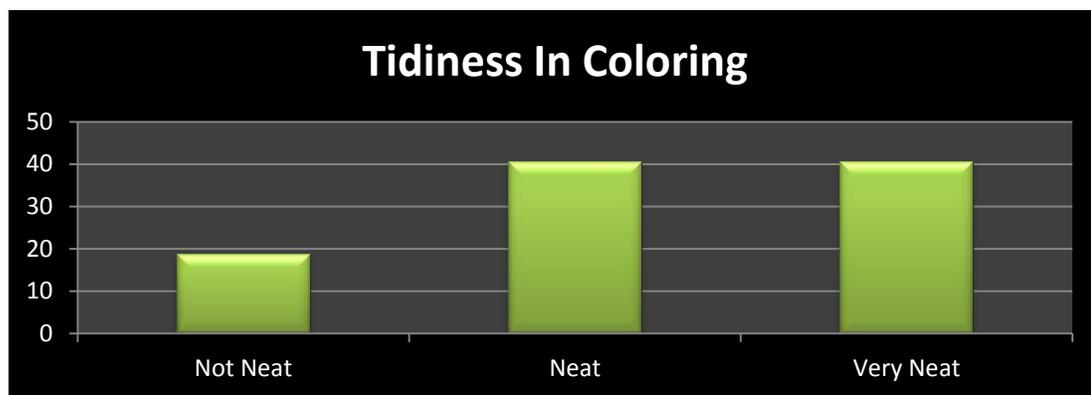
### 3.3 Coloring Neatly

Here is the percentage of students by neatness during the activities of coloring the images in students of the group B of Ar-Rozak Kindergarten in Aek Loba Pekan. The following table is the results of the first and second observations made by the observer in the class.

**Table 3.** Percentage of Students by Coloring Neatly

Category	Observation 1	Observation 2	Number	Percentage
Not Neat	4	2	6	18.75%
Neat	6	7	13	40.62%
Very Neat	6	7	13	40.62%

Here is the histogram of the percentage of students by tidiness in coloring when performing activities of coloring the drawings in students of the group B of Ar-Rozak Kindergarten in Aek Loba Pekan.



**Figure 3.** Histogram of Students' Ability to Color Neatly

Based on the table and histogram above it can be concluded about the percentage of students by neatness in coloring activities using creative art models in students of Group B of Ar-Rozak Kindergarten in Aek Loba Pekan. It was found that 18.75% of 16 students have not been able to do coloring activity very neatly, 40,62% student do it neatly, and equal to 40,62% can do coloring activity neatly.

The first study was conducted by Shofiyah, a student of Surabaya State University, entitled 'Application of Learning of Coloring Picture in Improving Fine Motor in Children of Group B of Hidayatus Shibyan Kindergarten'. This type of research is a

classroom action research conducted in Hidayatus Shibyan Kindergarten of Surabaya. The fine motor indicator assessed is colored evenly, colored neatly, and the ability to combine colors. The fine motor ability of pre-action pad 30% of the number of children present in the first cycle of meeting 1 was 58%, and in meeting 2 it increased to 73%. In cycle II of meeting I fine motor ability reached 84%, and increased in meeting 2 to 90%. Therefore, the learning of coloring the images can improve the fine motor skills of the children of group B of Hidayatus Shibyan Kindergarten.

The second study is titled *Improving the Ability of Fine Motor in Children 5 - 6 Years Through Activities of Coloring the Picture in Al-Iqra' Kindergarten of Mataram Learning Year 2012/2013* written by Annisa Kartikasari. This type of research is a development study. The development is the activity of coloring the picture. This research was conducted in two developments, each consisting of four stages namely planning, implementation, observation, and reflection. Method of data collection in this study used observation sheet of teacher and child activity, while data on the results of coloring the images is collected with worksheet. Based on the results of research and data analysis, it appears that there is an increase in the fine motor ability of children from development I to development II. This is evidenced by the number of scores obtained for 1627 and the percentage of learning mastery reach 80.95% in the development of I. Meanwhile, the number of scores obtained is 1891 and the percentage of learning completeness reaches 90.90% in development II or an increase of 9.95 points or 0.1% from development I. Thus it can be concluded that through image coloring activity using image media, can improve fine motor ability of children aged 5-6 years in class B3 of Al-Iqra' Kindergarten of Mataram.

According to Piaget (in Mills: 2014), cognition of young children is fostered through exploration and participation in the activities of play, especially imaginative play, in their environment. Then, Vygotsky (in Mills: 2014) states that playing allows children to learn new things, not so much reflecting thoughts (as Piaget suggests) but creating them. Furthermore, Vygotsky believes that children learn depends on social interaction and support what is called scaffolding. Scaffolding, provided by someone

with a larger knowledge base, helps children build the skills needed for optimal development. Creative art ideally improves the survival of children in development, both stimulating and involving, without any frustration or boredom.

Piaget and Vygotsky's work is used as the basis for developing creative art models by combining exploration and interaction between children and their environment. Giving children opportunities for collaboration, discovery, and exploration in creative art will foster children's cognition levels, which in turn can improve their physical, social, and emotional conditions (Koster, 2012).

#### **4. Conclusions**

Based on the results of research known that the fine motor skills of children by using creative art models in coloring activities in students of Group B of Ar-Rozak Kindergarten included in the category of very good i.e. 88,4%. Coloring activities can help improve the fine motor of students; therefore teachers should increase the quantity of coloring activities in the plan of learning activities. In addition, teachers should continue to develop creative art models in learning activities for early childhood, so that the model of learning in early childhood continues to change and does not cause boredom for students at the time of teaching and learning activities take place.

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