Analysis of Manipulative Basic Motion Learning Model Second Grade Mentally Retarded Children at SLB Putra Mandiri

Authors

1*Supri Atin, 2Agus Kristiyanto, 3Siti Fadhilah
1*Postgraduated, Sebelas Maret University, Solo, Indonesia
2Lecture, Sebelas Maret University, Solo, Indonesia
3Lecture, Sebelas Maret University, Solo, Indonesia

Abstract: SLB Putra Mandiri is a special school that organizes education for mentally retarded children. SLB Putra Mandiri is a new school that does not have sports and health physical education teacher, facilities and infrastructure are very limited and mentally retarded children who look rigid and passive in sports learning. Teacher need to overcome basic manipulative for children with retardation in SLB Putra Mandiri. This is the background of this research so that the researchers found out how the learning of manipulative basic movements in class II mental retardation students at SLB Putra Mandiri. This research was carried out in schools with descriptive qualitative methods. To find out the ability of students in doing basic manipulative movements researchers used interview, observation, and documentation techniques during learning. The students sampled were class II mentally retarded students with a total of 6 students consisting of 4 male students and 2 female students. The results of this study indicate that mentally retarded students have been able to carry out basic manipulative movements even though not with sports and health physical education teachers.

Keywords: manipulative movement, catching and throwing, special school.

Introduction

Education can be obtained from the womb until it lasts a lifetime. Education is the learning of the knowledge, skills and habits of a group of people who are passed down from one generation to the next through teaching, training, or research. Education that is evenly distributed to all levels of society without discriminating between ethnic groups, races, religions, groups. Like education for children with special needs, they are entitled to the same educational services as normal children in general. Law Number 8 of 2016 concerning Disabled Persons is that anyone who experiences physical, intellectual, mental and / or sensory limitations for a long period of time in interacting with the environment can experience obstacles and difficulties to participate fully and effectively with other citizens. Based on the Law, children with special needs are also part of the generation that must get the opportunity to develop themselves according to their potential. They are part of the community who also need education in order to become independent human beings, can grow and develop into adults who have a high sense of self confidence in leading and perpetuating themselves for the nation and state in the future.

Children with mental retardation are part of children with special needs who are entitled to education at school. They also have the right to get existing courses in school in accordance with the applicable curriculum in the school, including physical education in sports and health, where in those subjects mentally retarded students are able to develop motor skills, physical abilities, knowledge and reasoning, appreciation of values that have implications on mental, emotional, spiritual and
social attitudes and healthy living habits to stimulate balanced and intact growth and development as human beings both physically and spiritually. This was confirmed by Rahyu (2012) that physical education, sports, and health are basically an integral part of the education system as a whole. Therefore, the implementation must be directed towards achieving that goal.

Physical Education Sport and Health are obtained in schools such as at SLB Putra Mandiri which organizes education for children with special needs including mentally retarded children as a process of human development that lasts a lifetime. Physical Education Sport and Health provides opportunities for mentally retarded students to be directly involved in various learning experiences through physical activity, play, and sports that are carried out systematically, directed and planned. The curriculum model determines the focus of the program implemented whether it is oriented towards increasing physical fitness or movement skills. For example the curriculum related to sports physical education and health is basic education (movement education).

According to the Ministry of Education and Culture (2016) on core competencies and basic competencies of Extraordinary Schools of Disability (SDLB Tunagrahita) Physical Education, Sports and Health subjects, one of the basic competencies of knowledge that must be achieved for class II mental retardation students is recognizing manipulative basic movements (kicking, throwing, catching) in the form of modified simple traditional games. Whereas basic skills competency, class II retarded students practice basic manipulative movements (kicking, throwing, catching) in the form of modified simple traditional games. In the Law of the Republic of Indonesia Number 3 of 2005 concerning National Sports System Chapter VII section 7 concerning the development of disabled sports Article 30 paragraph (1) explains that the development and development of disabled sports is trained and directed to improve health, confidence, and sports achievements. On this basis, the disability possessed by a student is not a barrier to achievement in its shortcomings and does not become an obstacle for these students to be healthy and for the freedom of movement of these students. The applications of physical education learning for children with special needs is better known as adaptive physical education. Adaptive physical education is one way to serve children with special needs in the field of physical education so that the methods and methods of learning also adjust the abilities of children with special needs themselves.

Based on observations and short interviews with teachers and students at SLB Putra Mandiri, the development of manipulative basic movements was not taught in Physical and Health Physical Education, due to the absence of the Health Physical Education teacher so that the class teacher also served as a teacher of Physical Education and Health. The learning process of Physical Education for Sport and Health is carried out simultaneously from Class 1-6 in the school field which is followed by walking around the school. In addition, there are also limited facilities and infrastructure in schools so that mentally retarded children look passive in the teaching and learning process of physical education.

Physical Education Sport and Health is an education that is very important for the growth and development of children, therefore the patterns of movement or games that are taught are in accordance with the movement needs and characteristics of mentally retarded children. Children with mental retardation generally have physical characteristics that are not much different from normal children. But mentally retarded children experience intellectual obstacles, so they also experience motoric barriers. Andayani (2015) stated that the disturbance in the brain nerves in children with mental retardation also caused obstacles in responding to their motor movements.

The event that was seen in physical education learning at the SLB Putra Mandiri above, it is necessary to have a solution to overcome this so that the learning objectives can be achieved. One of them is by modifying learning through the application of games in sports. Saputra (2015)
revealed that to create a learning atmosphere that is in accordance with the character of students and can encourage enthusiasm for students to take part in learning physical education, sports and health by applying traditional games especially during warm-up. The same thing was expressed by Anggraini (2014) that thematic learning integrated the 2013 curriculum using traditional game themes and models as one of the fun, active, effective and meaningful learning for students.

Games that prioritize manipulative motion can be performed on various sports activities and physical activities carried out on a daily basis. Sulistiyani (2016) argues that one of the activities is given to develop the ability of manipulative movements in children, namely activities involving the feet, hands, and the whole body. The development of the ability of manipulative motion can be stimulated by various activities outside the classroom or games, one of which is through throwing a ball.

The results of observations in the field, mentally retarded students at SLB Putra Mandiri experienced many obstacles in carrying out manipulative movements; therefore a learning model that could accommodate mentally retarded students in SLB Putra Mandiri was needed to be developed through the Tangkap Oper Gempur (TOGE) game. This toge game is an interesting traditional game that is repackaged in an interesting way, wherein this game combines motoric and cognitive skills and uses a variety of media so that mentally retarded children feel happy and interested in taking physical education lessons. Based on the above background, the researchers wanted to know Manipulative Basic Motion Learning Class II Students with mental retardation at SLB Putra Mandiri.

Methodology

This study was conducted in SLB Putra Mandiri Kawunganten, Indonesia. The sampling technique of sampling the data source with a certain consideration (Sugiyono, 2016). This research is qualitative descriptive according to Sugiyono (2016) qualitative research is a research used to examine the condition of natural objects and researchers as a key instrument, data collection techniques with triangulation, data analysis are inductive and qualitative so that the results of qualitative research more emphasize the meaning than generalization. Meanwhile, according to Sukmadinata (2011) qualitative descriptive research is a study that describes the existing phenomenon, does not provide treatment and more describes the condition as it is. This research was carried out on class II SLB Putra Mandiri mentally retarded students, amounting to 6 students. Consisting of 4 male students and 2 female students. The data collected in this study came from teachers who teach children with mental retardation in SLB Putra Mandiri.

Techniques or research procedures used to collect data are:

1) Interview

It is a meeting of two people to exchange information and ideas through question and answer, so it can be constructed meaning in a certain topic (Sugiyono, 2016). In this study, researchers used structured interviews because in conducting interviews researchers have prepared research instruments in the form of written questions that alternative answers have been prepared (Sugiyono, 2016). The interview instruments are as follows:

a) Obstacles experienced by the children with mental retardation in doing the manipulative base motion.

b) Use of media in sports learning.

c) The media used can overcome the basic manipulative motion obstacles in the children with mental retardation.

d) Games used in sports learning.

e) The game used can overcome basic manipulative motion obstacles in the children with mental retardation.

f) Needs needed to overcome the manipulative base motion for children with mental retardation.

2) Observation

Observation is an activity with regard to an object using all the senses (Arikunto, 2006). The type of observation is participative observation, ie the type of observation that involves the researcher in the
observed activity so that the data obtained is more complete, sharper and to know at the level of meaning of each behavior that appears (Sugiyono, 2016). Data collection using this method is used to collect data related to the implementation of learning, starting from the planning and implementation that is done when the process of learning sports take place. Then look for obstacles encountered during the learning process.  

3) Documentation  

Documentation is a complement of interview and observation methods in qualitative research (Sugiyono, 2016). In carrying out the method of documentation, researchers investigate written objects such as books, magazines, documents, regulations, diaries and so on (Arikunto, 2006). This documentation method is used to complete the research in order to obtain a clear picture of the research undertaken. The document required in this study is a record of the ability of the children with mental retardation in learning sports.  

Literature Review  

a. Definition of mentally retarded children  

Mentally retarded children are children who significantly experience mental retardation and retardation - intellectuals are below average, so they have difficulty completing their tasks (Garnida, 2015). Impotence is a term used to refer to children with intellectual abilities below the average. According to Edgar Doll (in Efendi 2006: 89) argues that someone is said to be mentally retarded if: (1) is socially incompetent; (2) mentally below normal; (3) intelligence is hampered from birth or at a young age; and (4) the maturity is inhibited. Meanwhile, according to The American Association on Mental Deficiency (AAMD), a person is categorized as mental retardation if his intelligence is generally below average and has difficulties in social adjustment in each phase of his development, Hallahan and Kauffman (in Efendi 2006: 89). In line with the above opinion according to Efendi (2006: 90) mentally retarded children (debil) are mentally retarded children who are not able to follow the normal school program, but he still has the ability that can be developed through education even though the results are not optimal. Abilities that can be developed in mentally retarded children are: (1) reading, writing, spelling, and counting; (2) adjust and not depend on others; (3) simple skills for future work.  

This is confirmed by the opinion of Intellectual Disability Right Service Inc. (2016) which states that intellectual disability is a disability that occurs during the development of life (i.e. before the age of 18) and is characterized by intellectual function below the average. Most intellectual disabilities are born with disabilities. According to Desiningrum (2016) mental retardation is a child who actually experiences barriers and intellectual developmental retardation is far below the average so that he experiences difficulties in academic, communication and social tasks.  

From some of the above meanings it can be concluded that mentally retarded children are children who have mental and intellectual barriers and have intelligence below the normal average and experience obstacles in social interaction.  

b. Classification of Mentally Retarded Children  

The Directorate of Extraordinary School Development (2009) classifies mentally retarded children as follows:  

1) Mild mentally retarded children with an IQ of 50-70.  
2) Moderately retarded children with IQ 25-49.  
3) Children with severe mental retardation with IQ 25 or lower.  

According to Efendi (2008) classifying mentally retarded children into three, namely:  

1) Children with mental retardation who have the ability to be educated with an IQ range of 50-75.  
2) Mentally retarded children who have the ability to be trained with an IQ of 25-50.  
3) Mentally retarded children who have the ability to be treated with IQ 25 or lower.  

c. Understanding Manipulative Basic Motion
Basic movement is the basis of a skill that requires guidance, training and development so that children can do it well and smoothly according to directions (Yudanto, 2005). Whereas Pratomo (2012) explains that manipulative motion is a type of movement that requires quite good coordination because in manipulative movements it involves several elements of motion that must be coordinated into one pattern of good and harmonious movements. According to Amirzan (2015) manipulative motion is any form of movement that uses various tools such as kicking a ball, throwing objects and in the form of play with other tools. The development of basic movement skills in elementary school-age children is closely related to sports learning, because sports creativity and play for children is an integral part. Manipulative skills are the foundations of various game skills. Movements that require energy, such as throwing, hitting and kicking and receiving objects, such as capturing are important skills that can be taught using various types of balls.

According to the National Education Standards Agency (2006) physical sports and health education is an integral part of education that aims to develop aspects of physical fitness, movement skills, critical thinking skills, social skills, reasoning, emotional stability, moral actions, aspects of healthy lifestyle and knowledge clean environment through physical, sports and health activities designed systematically in achieving the national education goals. With a manipulative basic motion game students can find real entertainment, so that they are far from feeling stressed or other things that can disrupt their psychological condition, Richard Decaprio (2013).

**Discussion**

The skills of manipulative basic movements of class II mentally retarded students are still very low, which can be seen when children carry out sports in the field. Therefore, giving toge games is very necessary to improve the manipulative basic skills of class II mental retardation students at SLB Putra Mandiri. Game toge is an acronym of tangkap, oper gempur (catch, pass, ruin). As for the tools needed in the game toge, namely.

**How to play toge game as follows:**

1. **Catch**

Row learners flock, taking turns catching the ball thrown by the teacher. The distance between teacher and students is about 3m with the can arrangement. The teacher throws the ball by throwing it from above.
2. Pass
Passing on this research is a throwing movement from above towards other players. In this study students who will pass the ball are students who have captured the ball from the teacher then throw back to the teacher by throwing the ball from above as exemplified, then taking one can that has been arranged, moved to another place to be rearranged into a tower. And so on until the participants ran out and the stack of cans moved.

3. Ruin
One by one the students pounded or threw a neatly arranged tin tower, after the tower collapsed, and then it was rearranged by the thrower with the help of his friend who was waiting for his turn. And so on until the player runs out.

Instrument assessment related to students' basic motion skills is obtained based on indicators. In addition, scoring is set for each criterion using tables

<table>
<thead>
<tr>
<th>No.</th>
<th>Aspects</th>
<th>Descriptors</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Catch</td>
<td>Students actively carry out basic movements to catch the ball skillfully.</td>
</tr>
<tr>
<td>B</td>
<td>Overhand throw</td>
<td>Students actively carry out the basic movements of throwing the ball from above correctly.</td>
</tr>
<tr>
<td>C</td>
<td>Underhand roll</td>
<td>Students actively carry out the basic movements of throwing the ball from below correctly.</td>
</tr>
</tbody>
</table>

Table 1. Observation Sheet

<table>
<thead>
<tr>
<th>Student Names</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>SE</td>
<td>11</td>
</tr>
<tr>
<td>FA</td>
<td>9</td>
</tr>
<tr>
<td>AI</td>
<td>8</td>
</tr>
<tr>
<td>IS</td>
<td>13</td>
</tr>
<tr>
<td>DI</td>
<td>10</td>
</tr>
<tr>
<td>Ok</td>
<td>12</td>
</tr>
<tr>
<td>Total (Σx)</td>
<td>63</td>
</tr>
</tbody>
</table>

Table 2. Student Activity Data

Based on the data above, the number of student activity scores was 76. The total score was analyzed to determine the average activity of students with the following formula:

\[ \bar{x} = \frac{\sum x}{N} \]

\[ \bar{x} = \frac{63}{6} \]

\[ \bar{x} = 10.5 \]

To determine the level of student activity, the average values analyzed are as follows:

\[ M\% = \left( \frac{M}{5M1} \right) \times 100\% \]

\[ M\% = \left( \frac{10.5}{13} \right) \times 100\% \]

\[ M\% = 80, 7\% \]

Based on the above analysis, it appears that the average percentage (M %) of the student's skill level is 80.7%. After being converted to PAP scale 4, the value is at 80% - 85%. The interval shows that the activity is in a good category. That means there is an increasing change in manipulative basics of class II mentally retarded students. Students look more like to go playing games.

Conclusion

Based on the above research it can be concluded that the absence of teachers of physical education, sports, and health is not an obstacle in learning manipulative basic movements. This can be done by mental retardation class II teachers who are also teachers of physical education, sports, and health. To go games can make mentally retarded students feel happy and manipulative basic movements can increase.

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