

# Sport Talent Scouting for Students with Intellectual Disabilities

(Preliminary Study on Post School Transition Program in Disabilities)

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**Abstract**—Sport is a common choice of career for most people. However, it is more problematic for students with intellectual disabilities. The study aims at 1) proving that motor skill can be developed as a career alternative for students with intellectual disabilities. 2) eliciting a certain sport that can be a career interest for students with intellectual disabilities. The sample of this study includes students with intellectual disabilities in a special school. The study employed an action research conducted in cycles. Data on sport activities were collected by means of tests based on interest and talents assessment. The data were then analyzed through series of tests to find the differences among the tests before and after intervention. The results showed: 1) there was an improvement of motor skill in each time of intervention of ball games. the feasibility of sport as a career interest for students with intellectual disabilities. 2) a certain sport is feasible as a career interest for students with intellectual disabilities.

**Keywords**—Intellectual disabilities, motor skills, talent scouting, future career

## I. INTRODUCTION

National Education Law states [1] that the education a fundamental right for every human being including those with disabilities. Education is one of the efforts to improve the quality of human life through career for their future regardless any background. Children with intellectual disabilities are known to possess special characteristics different from other children in general in terms of cognition, and motor skills [2]. Due to their unique characteristics and obstacles, students with intellectual disabilities require a special form of educational service adjusted to their abilities and potentials to develop their career in sport through physical education [3]. According to [4] motor skills are the result of individual movement in doing sports or motor skills maturity. In sports, learning process is directed to improve the ability of learners in maintaining the physical health, courage, ability, and confidence. To develop cognitive ability and form a physical health, learners need to be presented game in the form of sports. However, the development is still unseen. Therefore, a game that can form a healthy physique and the formation of a qualified character is needed. A small ball game can be an alternative choice.

Children with intellectual disabilities are characterized mainly by intellectual deficit and followed by an

inappropriate social behavior [5]. They generally have difficulty in following the lesson particularly when it is delivered through direct instruction. They like motor movement rather than cognitive activities. They enjoy the out class activities more than in class lessons. A research by [6] indicated that children with low average intelligence tends to academic and motor skills. Another research The research showed a positive relationship between poor academic and poor motor performance [7]. It means children with reading problems may also have a high risk motor problems [8]. Such an assumption also turns to be true to the fifth grade of students with intellectual disabilities of SLB Kendal, Cental Java, Indonesia. They can follow the lesson, indeed, but they cannot understand the subject given by the teacher. One of the strategies to make the students can accept the subject well especially on sport is with a small ball game. Small ball games offer some advantages: 1) healthier physical condition 2) children get better concentration 3) train patience 4) improve children skills 5) improve better self confidence, and 6) building social character.

The purpose of this study is to improve motor skills in sports through small ball game on the fifth grade children with intellectual disabilities in Special School in Kendal, Central Java. Further more, motor skills in sport are considered conducive as to enhance possible career building for their future. From this research, the students are expected to obtain sport skill and physical fitness which are suitable for both self-confidence improvement and social character building

## II. METHOD

The study was a type of classroom action research. The research included 8 students with mild intellectual disabilities in the 3<sup>rd</sup> grade of a special school. Sources of data were of the interest and the dribbling skills of ball game. The interest and talent were taken through interview and observation. Meanwhile, the ability of ball game was collected from dribbling skills by using the observation sheet. Data validity was done by triangulation technique [9]. This research was conducted by using classroom action research model with planning, implementation, observation, and reflection activities [10]. The action research was carried out in two cycles. Each cycle was implemented in accordance with the changes of achievement. The result of

observation and evaluation was then used as the basis of reflection for the next stage of action. The data were then analyzed through descriptive quantitative by comparing the performance test scores in each cycle and checked across the results of observation.

### III. RESULT OF THE RESEARCH

#### A. Pre-Action Description / Preliminary Condition of Students

The research was conducted in 2 cycles. Each cycle consisted of four stages, namely (1) planning, (2) implementation, (3) observation, and (4) reflection. Teachers delivered learning materials by lecturing method which is one of the methods commonly used by teachers. The lesson began with an explanation of the small ball game.

In learning, such students with intellectual disabilities gave less response to what the teacher say, the teacher eventually used whistles and claps to grasp students' attention. When the students listened to the lesson, the teacher repeated the explanation of small ball game with examples of movements like running, walking and various small ball games. Teachers assigned tasks to students in groups for running, walking after hearing the cue and doing small ball moves, such as bouncing the ball up and then capturing it, throwing the ball, catching the ball from the teacher or friends, bouncing the ball and putting the ball spread on the floor into the basket. Sports learning activities by doing small ball games were done until the allotted time ends. The learning ended without reinforcement each time the students accomplished the assigned tasks.

Based on the description of the motor skill improvement, learning through ball games for fifth grade of students with intellectual disabilities can be seen in the following table:

TABLE I. SCORES OF PRELIMINARY CONDITION

No.	Subject	M/F	Score	Note
1	RN	F	6	Incomplete
2	OP	F	6	Incomplete
3	RON	M	7	Complete
4	RZ	M	7	Complete
5	UD	M	7	Complete
6	WW	M	7	Complete
7	FQ	M	6	Incomplete
8	ML	M	6	Incomplete
Total score			52	
Average score			6,5	
Classical completeness			50 %	

The score of small ball game can be presented in the following graphic:

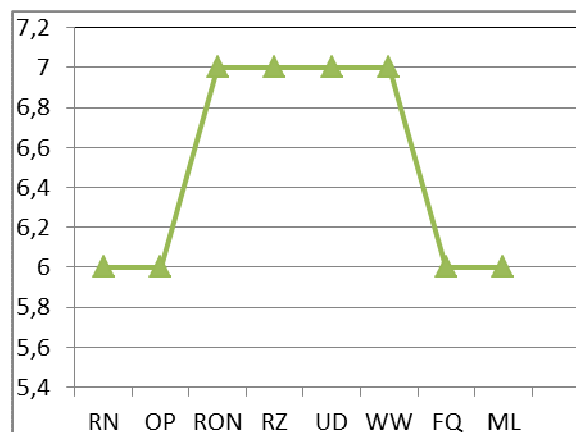


Fig. 1. Score of Preliminary Condition

Based on the data above, it can be concluded that the score of the initial condition of sports for the fifth grade of students was still low. From 8 students, only 4 students got score of 7 while the other 4 students got under 6. The classical mastery level was 50%. It means that the learning of sports was incomplete in accordance with standard score by 75%.

#### B. Activities of Action in each of two cycles

The implementation of each class action was done under the following activities: planning, intervention, observation, and reflection.

##### 1) Implementation

The ball game sports learning in each of two cycles was emphasized on the skill in doing small ball game movement. In this case, the implementation of the lesson plan was prepared in accordance with classroom action research procedures such as through various stages:

##### a) Planning

Teaching in classroom is one of the teachers' tasks. Therefore, a teacher should be professional in performing their duties. One of the teachers' duties is to improve students' learning achievement. A teacher should be able to see the cause of low achievement. Students have difficulty in understanding the cue and the movement that has been instructed by the teacher. In this case, a teacher must perform an action to improve student achievement. Planning activity was done by preparing a lesson plan in the form of syllabus, learning execution plan, blueprint, test questions, small ball game media, assessment sheet and observation sheet.

##### b) Intervention activities

The researcher acted as teacher to do the following learning steps:

- Introductory Activity (10 minutes)
- Main Activity (40 minutes)
  1. Exploration
    - a) Show the ball game tools
    - b) Ask students to walk and run after hearing the cue of doing the ball game.

## 2. Elaboration

- Students mention the cue of running, walking and play the ball game.
- Students run and walk after hearing the cue to perform the ball game.

## 3. Confirmation

- Conduct an assessment of activity that has been implemented consistently.
- Provide positive feedback and reinforcement to student.
- Make a summary of the material that has been given.

## • Closing activity (10 minutes)

- Giving moral messages to make students keeping their regular exercise,
- Give rewards to students with good achievement

## c) Obsevation

Based on discussions between the headmaster and the teachers in motor sport improvement through the ball games, it proved that the role of teachers to generate students' interest in learning was still low. The use of learning media did not attract the attention of students.

Based on the results of the observation sheet, the ball game was not effective to improve children's motor skill. Most students were not paying their attention on their teacher, fool around and show low motivation in doing the movements instructed by the teacher.

Observation on each cycle of this research not only viewed on students' score but also observed students' motor skill. In this observation stage, the author used participant observation system. The author was directly involved in teaching and learning activities and tried not to influence the natural processes of teaching and learning activities that day.

## d) Reflection

Learning activities conducted in each cycle showed the changes of mood. In the second cycle the students looked glad and motivated in doing the ball games, running and walking as compared to the activities in the first cycle. There were even some students asking for playing the game longer. The results showed that there was 1 student got the score below standard with the classical completeness for 87.5%. Therefore, it can be concluded that the 2nd cycle reached the expected goal of classical completion for 75%. Thus in 2nd cycle, the researchers concluded that the actions of teachers in learning sports through small ball game can improve their motor skills among these students in this special school.

## C. Comparison of Results of Inter-cycle Action

After the researchers conducted a study on the first and the second cycle, the results can be summarized as seen in the following table:

TABLE II. RESULTS COMPARISON AMONG PRELIMINARY CONDITION SCORE, 1<sup>ST</sup> CYCLE TEST SCORE AND 2<sup>ND</sup> CYCLE TEST SCORE

No.	Name	M/F	Preliminary Condition Score	Posttest Score of 1st Cycle	2nd Cycle	
					Posttest Score	Note
1	RN	F	6	6,5	7	Complete
2	OP	F	6	7	7	Complete
3	RON	M	7	7,5	8	Complete
4	RZ	M	7	8	8	Complete
5	UD	M	7	7	8	Complete
6	WW	M	7	6,5	6,5	Incomplete
7	FQ	M	6	6,5	7,5	Complete
8	ML	M	6	7	7,5	Complete
Total Score			52	56	59,5	
Average Score			6,5	7	7,43	
Classical Completeness			50 %	62,5 %	87,5%	

From the above table, it can be seen in the following graph.

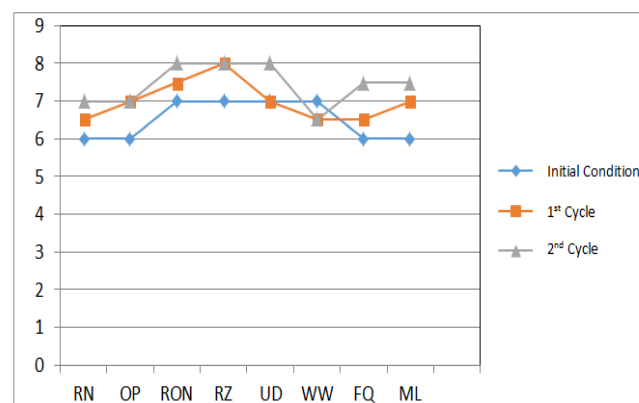


Fig. 2. Scores of Improvement from the Preliminary First, to the Second Cycle

Based on the preliminary results table, there are 4 students scored below 7 with 50% classical completeness level. This means that sport learning through small ball game has not reached complete mastery.

In the first cycle, only 3 students scored below 7 and the other students scored whether 7 or above 7. The average score is 7 with classical completeness was 62.5%. It can be concluded that the 1<sup>st</sup> cycle has not reached the expected goal in accordance with standard score for 75%.

In the second cycle there were 7 students scored above 7 and 1 student scored below 7 with average score of 7.43 and classical completeness for 87.5%. So, it can be said that the 2<sup>nd</sup> cycle was in accordance with the expected goal, i.e. all students have reached the standard score with 75% classical completeness. It means that the implementation of the initial

conditions, 1<sup>st</sup> cycle, and 2<sup>nd</sup> cycle has been improved and completed.

#### IV. DISCUSSION

This research is a classroom action research conducted in the fifth grade of students with intellectual disabilities in Special School of Kendal, Central Java. The early condition of sports learning in the fifth grade of students was still low. From 8 students, there were only 4 scored 7 while the other 4 students scored below 7. The classical mastery level was 50%. This means that the sport learning has not reached the mastery in accordance with standard score by 75%. Based on the result of the tests in the 1<sup>st</sup> cycle, the ability of students in sports learning shows the increase but it has not reached the mastery level of the whole class. After the encouragement under the principle of "try and error" to improve the of students' interest, better motor skills were found in the 2<sup>nd</sup> cycle with accomplishment level of 87.5%. It is true that encouragement can improve the performance [1].

Based on the observations, it was seen that the students' ability increased with the improvement of efforts resulted from the sports learning through the ball games. The enhancement can be seen from the increasing percentage of test results obtained by students, the increased concentration of students in learning, the more disciplined students, the ability to work together, and their honesty [11]. Students' understanding of the material was better and it improved their learning achievement. It turns that sports learning through ball games is very helpful in improving the motor skills of 3<sup>rd</sup> grade of mildly intellectual disabilities in respectd special school. According to [12], the ball game can improve the motor ability of students. Motor activity can be divided into two, namely gross motor activity and fine motor activity. Gross motor activity is the motion or movement of the body using large muscles as the main basis of movement. Gross motor skills include locomotors patterns of movements that cause shifting place; such as walking, running, kicking, going up and down stairs, jumping, hopping, and so on [13]. The other skill is the ability of playing with ball such as throwing, kicking, and bouncing the ball. Fine motor activity is defined as a skill that requires the ability to coordinate or regulate small muscles. For example, it relates to efficient, precise, and coordination of eyes and hands movements. The development of fine motor or eye and hand coordination skills is an important part of motor development. The examples of fine motor activity are the ability to move objects from the hand, doodling, arranging blocks, cutting, writing, and so on.

According to [14], motor ability is a combined process of stimulus and response. Motor ability is a capacity of a person related to the implementation and demonstration of a skill that is relatively inherent after childhood. Ball game can make a child not only to move their body, but also requires intelligence and intellectual skills, attitude skills and also understanding and mastery of the proper procedure of thinking skills [15].

Based on the above elaboration, it shows that ball game has great benefits due to the positive influence, both for individuals and groups. This positive influence is one of the effective learning methods for children, both normal children and children with disability, mental retardation and other

limitations. Sports learning through ball games for fifth grade students with intellectual disabilities in special school turn to be quite effective to improve motor skills and students' achievement [16]. With the ball games, children are more interested and motivated in learning, especially sports of ball game as out door activities [17]. This will attract children because it can increase students' learning desire, build students' confidence, cooperation and honesty [18]. In the long run, it is believed that ball game can constantly improve motor skills, and will lead to develop into better choice of their future career

#### V. CONCLUSION

After the classroom action research was conducted, it can be concluded that small ball game can improve the motor ability of students with intellectual disabilities of Special school. The result of this study indicates that small ball games can improve motor skills in mentally retarded students from the 50% completeness level to 62.5% and reached 87.5% at the end of the cycle.

From this research, it is concluded that students can gain sports skill and physical fitness suitable for students with intellectual disabilities. Practice on dribblings proves better skills among these students. However, it is strongly believed that improvement of skill will result in better performance when it is started with proper assessment of interest. In this study, it is also expected that teachers can find strategies of sports learning with small ball game to improve motor abilities which can lead to enhance better alternative of career in their future accordingly.

For further development of career alternative for students with , it is suggested that: (1) students with low motor skills in sports learning need to improve their good habit; (2) students with optimal motor skills should maintain their skill under the teacher's scaffolding. In addition, since this research is conducted in a small sample of a special school, another research is with larger scales of samples of children with intellectual disabilities is needed as to prove that ball game on the sport learning is able to improve motor skills.

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