# THE EFFECTIVENESS OF SIMPLE SIMULATION IN UPGRADING THE ABILITY TO HIT BADMINTON'S SHUTTLECOCK FOR CHILDREN WITH INTELLECTUAL DISABILITIES

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# Abstract

This research is motivated by problems in children who have'nt been able to hit badminton's shuttlecock, children have difficulty servicing and return of serve. This research aims to upgrading the ability to hit badminton's shuttlecock through a simple simulation. Simple simulation is a learning method presented in badminton several stepsthat simulated in the suspend ball game. This type of research is the single subject research with multiple baseline design across variables that aims to prove whether a simple simulation can upgrading the ability to hit badminton's shuttlecock for children with mild intellectual disabilities. Type the size of the target behavior is the percentage obtained to compare response of children with a total answer should be multiplied by one hundred percent. While the data were analyzed using visual analysis of the data graph that consists of the analysis in condition and between conditions. The results of the data analysis and the analysis of conditions among conditions seen that before given treatment using a simple simulation on the baseline condition, her ability at the time of service and upon return of services remains low, after a given treatment her capability of return of services increased. It is recommended to use a simple simulation of the teachers in the teaching of badminton (subjects sports) for children with mild intellectual disabilities, for researchers as reference information in a learning method for prospective teachers and to students at the University as a good method of learning information in the course of teaching and learning, microteaching and so forth.

**Keywords:** simple simulation, the ability to hit badminton's shuttlecock for children with intellectual disabilities, eyes- hands coordination and intellectual disabilities.

## Main subject text

Education is one of the most important element in human life. Education is a maturation process of human beings themselves, besides education is also a process of forming a personal and human character. Education is also a conscious and deliberate effort to create an atmosphere of learning and the learning process to make the students are actively developing the potential for them to have the spiritual power of religion, self-control, personality, intelligence, noble character, and skills needed them and society. In the academic field there are some subjects such as numeracy (math), read and write (Indonesian) then physical education and so forth, all of which have become subjects in

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primary school program in general. Physical education is organized physical activity to be a medium for education activities.

Physical Education and Sport is part of the standard curriculum for Primary and Secondary Education Institute. Physical education is inseparable from physical education because education is a sports physical training activities, namely physical activities to enrich and enhance the capabilities and basic motor skills and movement skills (sports). The activity was a form of approach to aspects of physical welfare or means of sound mind is a healthy dynamic sound also accompanied with motion capabilities that meet all the demands of everyday life movement, meaning that it has an adequate level of physical fitness. In the BNSP Education Unit Level Curriculum (2006) on the subjects contained in the standard physical education competence about doing different variations of the basic movements into games and sports with modified rules and values contained therein, and competence is essentially about doing a variation of the basic movements into modification small ball games as well as the value of teamwork, sportsmanship and honesty.

Focused on basic competence stated in the curriculum, the writer conducted an assessment of the small ball game given by the teacher to the students 'field of study physical education at school, in which a small ball game given by the teacher to the students' field of study that is a game of badminton. This assessment aimed to find out whether there is a child who has not reached the goal of learning so I can provide the services required in the child's game of badminton. Analysis of the data that the authors of the assessment can be done, there are children who can not serve and return of serve. At the time of serving children always make mistakes like not shuttlecock on the racquet strings were being held by a child, and at the time of service return hit the child can not return the shuttlecock coming toward him, the child can not determine how close it falls to the racket shuttlecock which she held. Compared with classmates, the child is seen clearly could not serve and return of serve. Therefore, the authors provide a specific service or solutions to assist these children in achieving learning goals outlined by field of study physical education teacher. One solution that the authors give is to use simple simulation, it is based on the opinions Wina Sanjaya (2009: 159) states that the simulation is as a teaching method, the simulation can be defined how the presentation of the learning experience by using mock situations to understand the concepts, principles or specific skills.

Interventions in this study by using a simple simulation to children mild intellectual disability. Proper use of simulation in the process of learning will make it easier for students to capture information to be conveyed by the teacher. According to the Wina Sanjaya (2009: 159) simulation as a method of teaching, the simulation can be defined how the presentation of the learning experience by using mock situations to understand the concepts, principles or specific skills. According Syaefudin Sa'ud (2005: 129) simulation is a model that contains a set of variables that displays the main characteristics of the system real life. Meanwhile, according to Muhammad Ali (1983: 83) simulation can be interpreted as a way of teaching the process artificially behavior.

Simple simulation is a form of teaching methods that bring children as if they are in the actual situation. In other words, children learn how the game of badminton in general and learning to hit a shuttlecock at the time of serving and hitting the shuttlecock during the return of serve in particular. Delivery of content via simulation

method will facilitate the child in receiving and understanding the given subject matter, also can increase children's interest and enthusiasm for learning, so children want to follow the lessons. Thus the child can obtain the expected learning outcomes as expected.

Simulation methods which are given to children in the form of a ball game suspension. The first activity of children hit a ball that was silent, as shown below:



Activities of the two children hit the ball that is reflected to the wall, as shown below:



The third activity of children hit a ball thrown by the teacher and the ball remains suspended, as shown below:



Activities were all neatly packaged, which will describe the child as if playing a game of badminton, but the circumstances were simulated it only focused on how to hit the shuttlecock is true, all the activities were done simply.

As for the advantages of a simple simulation that the authors use as a solution of the problem of children is as follows:

Simulation can be used as a preparation for students in the face of the actual situation in the future, both in family life, community or face the working world. Simulation can develop students' creativity, because through the simulation students are given the opportunity to play a role in accordance with the simulated topic.

Simulation can cultivate courage and confidence of students.

Enrich their knowledge, attitudes and skills, which are necessary in the face of various social situations problematic.

Simulasi dapat meningkatkan gairah siswa dalam proses pembelajaran.

The purpose of the implementation of this research is to improve the ability to hit the shuttlecock in a badminton game for mild mental retardation in children SLB Wacana Asih Padang. For the measurement of variables in this study used percentages, in the opinion of Djuang Sunanto (2006: 18) percentage is the ratio between the number of an event with many possibilities of occurrence multiplied by one hundred percent.

Based on the problems studied, the kind of research is an experiment in the form of SSR (Single Subject Research). Experiment is an experiment that is used to examine an event or phenomenon that emerged towards a particular state whether it is positive or negative. The study used multiple baseline design between variables with variable ability to hit a shuttlecock at the time of service and the ability to hit the shuttlecock during the return of serve. The hypothesis that the authors propose in this study is "simple simulation can improve the ability to hit the shuttlecock in a badminton game for mild mental retardation X children in special schools Wacana Asih Padang". The answer of this research hypothesis is accepted hypothesis, because the intervention is given through a simple simulation capabilities mild mental retardation children class V/C in SLB Wacana Asih Padang in the ability to hit a shuttlecock in a badminton game.

The first dependent variable is the ability to hit a shuttlecock at the time of service. Observations on the condition of A do as much as ten times, and observations on conditions and do as much as twelve times. On the condition B, after being treated through a simple simulation capabilities of the child began to increase compared stopped condition A. And the treatment is given when the child scores stable, namely the observation of ten to twelve children achieved a score of one hundred. The second dependent variable is the ability to hit a shuttlecock at the time of service return. Observations on the condition of A do as much as ten times, it seemed the ability of children is not stable, but in the eighth to ten observation abilities of children began to stabilize, but decline. Observations on the condition and do as much as fourteen times, the condition B which has been given a child's treatment capabilities continue to increase, and at the time of observation of twelve to fourteen hundred children gain value. Treatment stops in the fourteenth observation, because a score of children are stable and obtain maximum score.

Guided by BNSP Education Unit Level Curriculum (2006) contained in the standard of competence about doing different variations of the basic movements into games and sports with modified rules and values contained therein, and competence is essentially

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about doing variations of basic motion into a small ball game modification as well as the values of cooperation, fairness and honesty. The authors modify the steps badmintongame in accordance with the ability of children who have been the author of the assessment. To modify measures writer badminton game starts on the theory of Anne Ahira and Prasetyo on page 16 to page 23, where there is a category of measures in playing badminton. The authors modify the steps badminton game that will be given to the child mild mental retardation X that is the subject of the study authors, so the steps are as follows:

# At Currently Serving

	Table 1 - Assessment criteria at the time of service	
No	Indicator	
1	Holding racket	
_	Should the child:	
	a) Hold the racket by using fingers	
	b) Establish the racquet upright sides with floor	
2	Position Should the child: a) Standing tall in a field that has been provided	
3	Footwork Should the child: a) Stepping when hitting the shuttlecock	
4	service	
	What to do child:	
	a) a) slammed into a racket in	hand

At the time of service return

Table 2 - assessment criteria at the time of service return		
No	Indicator	
1	Holding racket	
	Should the child:	
	a) Keep holding the racket by using fingers	
2	Position Should the child: a) Standing tall in a field that has been provided	

hershuttlecock

- 3 Footwork
  Should the child:
  - a) Running pursuit shuttlecock to hit back
  - Service return
- 4 What to do child:
  - a) Hit bounced back with finesse to the right hand of the child
  - b) Hit bounced back with finesse to left fence child.

From the results of the assessment and intervention can be explained in graphic form below:

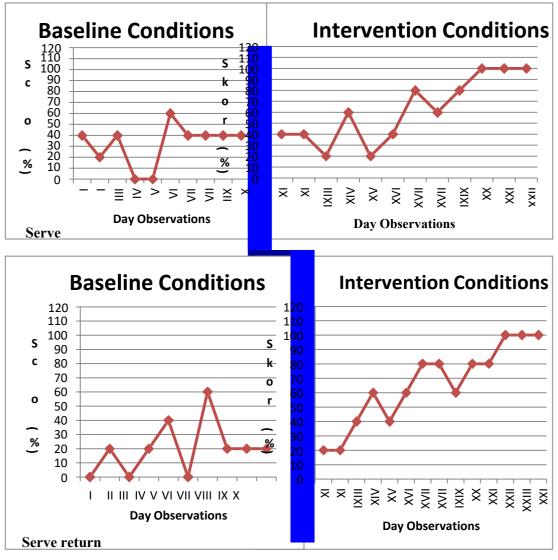


Figure 1 - Recapitulation ability to hit a shuttlecock at the time of service and service return under baseline conditions and interventions

Based on the above data can be explained that before being treated through a simple simulation, children's ability to hit the shuttlecock in a badminton game is still low. However, after being treated through a simple simulation Traffic child in hitting the shuttlecock in a badminton game continues to increase. This is in line with the above opinion that mild mental retardation in children's ability SLB Wacana Asih Padang in hitting the shuttlecock with the ability to serve and return of serve can be improved through simple simulation.

## Conclusion

Based on the research that has been described previously, which was held in SLB (school for students with special needs) Wacana Asih Padang that aims to improve the ability to hit the shuttlecock in a badminton game for mild mental retardation children class V / C through a simple simulation. On the ability to hit a shuttlecock at the time of servicing the observations made during the baseline condition (A) is as much as ten times, and twelve times the observation intervention condition (B). On hitting the shuttlecock during the Traffic service return on observations made during the baseline conditions (A) as much as ten times, and fourteen times in the observation intervention condition (B). Monitoring and assessments carried out in this study using a measurement variable percentage, how many children can do grains assessment compared with the total number and multiplied by one hundred percent.

Simple simulations are used to improve the ability to hit the shuttlecock in a badminton game is a learning method that demonstrate something as though events like the original. In the present simple simulation that researchers have assisted with props in the form of a ball chain that trains children in hitting the shuttlecock.

By using this simple simulation of a child more easily understand the material about the game of badminton given by the researchers. This simple simulation activities will attract the attention of children because learning is not mononton, provision of learning which resembles the original invite children as if he were playing a game of badminton. This can be seen by comparison to the current baseline conditions, the ability of the child at the time the service is still lacking at all visible from the percentage of children whose abilities ranged between 40 and 20. While in the intervention condition, appears to change as expected, kemapuan children at the time of service be increases, it is evident from the percentage ranges between 60, 80 and 100.

The ability of children at the time of return of serve is still lacking at all visible from the Traffic percentage of children between 0 and 20. While in the intervention condition, visible changes the ability of children of less once a maximum, the ability of children at the time of service return increased from the condition before being treated. Traffic percentage of children at the time of service return ranges between 60, 80 and 100.

Based on the description of the results of these observations it can be concluded that the ability to hit a shuttlecock in a badminton game for mild mental retardation children class V / C in SLB Wacana Asih Padang can be improved through simple simulation.

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