

# INVESTIGATION OF BASIC MOTOR SKILLS ACCORDING TO TGMD-2 TEST ON STUDENTS FULL DAY SCHOOL

### Fajar Ari Widiyatmoko

fajr810@gmail.com

#### Abstact

Children must explor their environment if they are to develop maximum cognitive abalities, and full day school guessed condsider movement activites more than other school. This study investigated of basic motor skill levels children at full day school. The sample comprised 14 children aged 8 – 10 years. TGMD-II (Test of Gross Motor Development-2) was used a measurement method for basic motor skills. According test the findings showed that, average locomotors sub-test scores = 8, object control sub-test scores =10 and gross motor quotient = 96. This result indicated motor skill levels is average. The full day school need employing appropriate strategies to target motor skill development across the childhood years is ofparamount interest in helping shape children's physical activity behavior, their experiences related to physical activity, as well as maintain their physical activity.

Keywords: Full Day School, Basic Motor Skills

## INTRODUCTION

Movement is expressed in a change of position any piece of the body or as a change of complete body position. Astrand indicates that the human organism is created to movement. Application of physical education programs to the developer needs to be qualified to the child's physical fitness, cognitive motor and social-emotional features. Cognitive motor development is defined as to perception of various stimuli through sense organs of the child and depending on these perceptions of some movement to begin. The children that translate to correct perception from correct and sufficient sensations, stage of their development will be the future of the children(Canan Bastik, Arslan Kalkavan, et al. 2009).

Research has provided evidence that participation in physical education (PE) and sports may help facilitate child physical activity. Indeed, participation in sports has been shown to increase overall physical activity behavior among young individuals (Pfeiffer et al., 2006). However, as of 2006, only 3.8% of elementary schools, 7.9% of middle schools, and 2.1% of high schools offered students daily PE for the entire year.

The result of research showed relationship among physical, and children intellectual growth. The result isphysical growth and motor development are positively correlated in children aged 5-6, with no such relation between these domains and intelligence (Visnja, et al. 2016). The other study has conclusions is motor activity, and particularly the training of coordinative capacity, could be one of the factors that contributes to increasing the potential for cognitive development in children. That case proved how important motor growth for children is.Development is a lifelong process, and different aspects of development (physical, motor, cognitive emotional, etc.) are correlated and interdependent in multiple ways. The complex interreaction of our genes, and our social, cultural, and physical environment, is what defines us.According to the current theories, cognition, perception, motor behavior, and emotions are in close relationship.

School-based PE offers a great opportunity to ensure children have the necessary fundamentalrelated movement skills that may help to contribute to increased immediate and long-term physical activity(Paul D. Loprinzi, 2015). Additionally it's difficult to implement school curriculum in Indonesiabased physical education as effort to increase physical activity, It was compounded by implementation of physical education which is not maximal. Development of prevalent obesity in last three decades for children of Elementary school (SD) in some big cities in Indonesia showed the range of the number among 2,1-25 % (Suherman, 2014). Furthermore, physical vitality of Indonesia society, showed very poor less than 20% of Indonesia society have physical vitality average to high.

# Full day school

Generally Full day school is a school program that applyteaching learning process for full day at school. Usually school which applies full day school education started at 7.00 am until 16.00 pm. The term of full day school comes from words day school (English) means day school. Definition of day school is day which is used by an institution to give education for children (or school age). By adding word *full to* day school so that education is conducted full over in a day starts morning until near evening.

Full day school started around year 1980 in USA for kids then spread away for higher level until senior high school. The background came up Full Day School is higher of mother who have kids attain the age under 6 years old and they work outside also progress all of life aspects, so that many parents hope their children's academic score will be better as a preparation to step up to next level, also can solve era progress problems. By registering their children to full day school, parents hope their children more spend their study time at school than home and the children at home near evening to gather with their family.

In Indonesia, full day school education model was exist for long time, that is boarding school. Generally boarding school students would learn for full day even over until evening to learn Islam beside others knowledge. In Indonesia, school which appliedfull day school model usually school based religion or international school.

Full day school program are institution aspect, leadership and management, refer to concept which is developed by school which has full day school program that force good morals and academic achievement. School leadership is spurred on by increasing personal quality, increasing management ability and knowledge of contemporary education concepts which is supported by short-course activity, orientation program and comparison study, mean that this program is conducted simultaneously and continually. The quality of official of full day school is chosen from specialist teacher who professional, qualified and well integrity. Increasing quality of official such aslibrarian, laboratories and administrator also as concern on developing quality of full day school program. The school curriculum of full day school program is also conducted well to spur superiority in science, religion, language based on information technology (IT), region knowledge, vocational ability and extracurricular and self development.

### **METHODS**

The research is conducted in integrated islamic elementary school (SDIT) Mutiara Hati which applied full day school method. Sample included the total of 14 healthy children (9 boys and 5 girls). Age of participants is 7 - 10 years. Then, the development of basic motor levels of children



wasmeasured by the TGMD-II test.Locomotor tests:Running, gallop, skipping, bouncing, standing long jump, side slipping. Object control tests:Hitting the stopped ball with a stick, dribble the ball, kicking the stopped ball, catching the ball, shooting the ball on the above of waist level, shooting the ball under the waist level. The scoring is based on Total Motor Development Test (Ulrich, 2000). **RESULTS** 

Nama _	Subtest Standard Scores			(coores)	Deckrinci Dating
	Locomotor	Object Control	Σ	- (scores)	Deskripsi Rating
Afiq	9	11	20	100	Average
Andika	7	10	17	91	Average
Andi	5	11	16	88	Bellow ave
Daffa	5	7	12	76	Poor
Danan	5	11	16	88	Bellow ave
Fabiam	5	10	15	85	Bellow ave
Firdaus	6	10	16	103	Average
Falih	7	11	18	94	Average
Feza	5	11	16	88	Bellow ave
Safira	12	8	20	100	Average
Reva	12	9	21	103	Average
Alfi	12	10	22	106	Average
Mutiara	13	12	25	115	Above ave
Rahien	13	9	22	106	Average
Rata-rata	8	10	18	96	Average

Basic descriptive statistics for the whole sample is presented in Table 1. Tabel 1. The Result of Tes Gross Motorik Development-2 (TGMD-2)

Form the table 1 above seen detailed ability of students' gross motor of elementary school. The average of students' loco motor ability are 8 (*score persentil*), and the average of students' manipulative ability are 10 (*score persentil*). the average of overall students' gross motor ability are 96 and belong to average category.

The results of childrens performance on the initial assasement of each indiviual skill. According to these result, generally is average of these skill. Therephysical education teacher has upgrade to work on locomotor and object control skill, becauce students is average in both area. Based on information TGMD-2, there teacher has developed the following program objectives for students:

- 1. Student will be able to demonstrate a run, moving there arm in opposition his legs with there elbows bent, four out of lives trials, foe three consecutive classes.
- 2. Student will be able to demonstrate a leap, reaching with the arm opposite the lead foot, four out of five trials, for three consecutive classes.
- 3. Student will be able to demonstrate a hop of any kind of on the right foot and then the letf, four out of five trials, for three consecutive classes.
- 4. Student will be able to demonstrate a horizontal jump with a preparatory movement that includes flexion of both knees with arms extended behind his body, four out of live trials, for three consecutive classes.
- 5. Student will be able to strike a stationary ball, with his dominant hand gripping the bat above his nondominant hand, four out of live trials, for three consecutive classes
- 6. Studen will able to demonstrate a kick, in which three is a rapid continous approach to the ball, four out of live trials, for three consecutive classes

7. Studnet will be able to demonstrate an overhand throw where them transfers his weight by stepping with the foot opposite the following hand, four out of the trials, of three consecutive classes.

# DISCUSSION

Based on problem discussion and purpose of this research, explanation about discussion of this research finding to explicit about gross motor ability of elementary students in full day school. The finding result of this research about the result of students' motor development was done using *Tes Gross Motor DevelopmentSecond Edition* (TGMD 2). The research finding showed that average score of students' gross motor ability are 96 and belong to medium category.

Curriculum in SDIT used full day school program that has superiority in science, religion, language based on Information Technology, local knowledge, vocational ability, extracurricular, and self development. To know process of curriculum implementation researcher observed on learning process both teachers and students activity. Beside that, implementation information is also found by interview to students. Students activity at school is not limited only in class. And activity which purposed in full day school program is "Integrated Activity" by this approach, all programs and students activity at school from study, play and pray are ordered in a education system.By this system is expected can give Islamic life valueto children completely and integrated with education purpose. Education concept which is truly conducted is effective school concept that how creating effective environment for children with consequences, the children is given more time at school environment.

Program and activity which are done in Mutiara Hati integrated Islamic elementary school as integrated program such as: dhuha prayer, islam learning, market day, family day, field trip, out bond, scouting, fun cooking and other extracurricular.A glance of those program which include with students' motor development actually is not enough yet, so it will be better for physical education teacher should maximize movement task on physical education learning. Movement task is movement learning activity which integrated with material and arranged by teacher explicitly and implicitly for students to study (Suherman, 2009). Those movement task are arranged by teacher to achieve learning purpose. So movement task generally is progressive, from easy to difficult, from simple tocomplex. Movement task can be communicated directly or not by teacher, for example by using students worksheet.Effective programs designed to improve the quality of PE to increase the amount of time that children engage in moderate-to-vigorous physical activity include, for example, the Sports Play and Active Recreation for Kids (SPARK) curriculum (Dowda et al., 2005).

Students response happen after teacher delivered movement task and the students do movement task. Teacher responsibility when students conducting movement task is observe and give feedback to students' performance both individual and group. For example, did students conduct movement task like teacher command. Did they do well ect. Then teacher give response to students to decide what teacher should do next, until movement activity with limited time can give maximal result.

Physical education have many benfit for children healths. Preventing obesity during early childhood is of particular importance, as young obese children are at an increased risk for adolescent and adult obesity (Veltsista et al., 2010; Telama, 2009) and have an increased risk of developing various health morbidities, including hyperlipidemia, hypertension, insulin resistance, respiratory



problems, orthopedic complications, and cancer (Freedman et al., 1999; Fuemmeler et al., 2009; Craig et al., 2008).

# CONCLUSION

Based on analysis of result research data and discussion, so this research can be concluded that students' gross motor development in full day school is average category with *motor quotient score* is 97. It means overall does not show effectiveness of full day school which is maximal on children motor development.

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