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International Seminar of
Sport Culture and Achievement

ISSCA 2014
PROCEEDINGS

"Global Issues of Sport Science & Sport Technology Development"

Diterbitkan Oleh:
Fakultas Ilmu Keolahragaan
Universitas Negeri Yogyakarta

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24 April 2014

Preface

Salam Olahraga!

Praise and be grateful to the Lord, so that this proceeding can be issued. The International Seminar of Sport Culture and Achievement with "Global Issues of Sport Science & Technology Sport Development" theme is held on 23rd- 24th April 2014 at Yogyakarta State University Hotel. The seminar is conducted by Faculty of Sport Science, Yogyakarta State University.

The seminar was conducted in order to enliven the 50th anniversary of Yogyakarta State University.The Seminar aims at revealing any growing sport potentials and recent worlwide research results. There are three pillars of sport: recreational sports, physical education/ sports pedagogy, and ellite sport that in common have one goal to form characters and support achievement.

Hopefully, the publication of this proceeding can bring benefits to the participants in particular and readers in general. Final words for all those who have helped this seminar, we thank you.

Dean of Faculty of Sport Science
Yogyakarta State University,

Drs. Rumpis Agus Sudarko, M.S.

Preface

Assalammualaikum Warrah Matullahi Wabarakatuh

The honorable speakers, Prof. Dr. Djoko Pekik Irianto, M.Kes. AIFO (Deputy of Achievement Improvement of Sport and Youth Ministry), Dr. Wayne Cotton (Australia), Dr. Jose Vicente Garcia Jimenez (Spain), Dr. Achara Soachalerm (Thailand), Dr. Lim Peng Han (Singapore), and Dr. Gunathevan A/L Elmulai (Malaysia). The distinguished guests.

First of all, on behalf of the committee of the International Seminar of Sport Culture and Achievement, let me express great thank to God Allah SWT who gives us opportunity and health, so that we can join this international seminar on sport culture and achievement. it is my pleasure to welcome you to the International Seminar of Sport Culture and Achievement in Faculty of Sport Science Yogyakarta State University.

The international seminar is in order to celebrate the 50th anniversary of Yogyakarta State University. In this opportunity, we invite five speakers from five countries; they are from Spain, Australia, Thailand, Singapore, and Malaysia. The participants of the seminar are 250 participants.

Finally, allow me to express my gratitude to all audiences, especially the honorable speakers and the distinguished guests for paying attention to this seminar. I hope that the seminar will run well and be successful.

Thank you very much.

Wassalamualaikum Warrahmatullahi Wabarakatuh

Yogyakarta, 24rd April 2014

Chairman of ISSCA,

Dr. Panggung Sutapa, M.S.

CONTENTS

PLAYING AIDS AND EARLY CHILDHOOD MOTOR SKILL IN KINDERGARTEN

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Abstract

The aimed of this study was to found out a direct relationship between the playing aids at school and the Early Childhood Motor skill. Type of this study was quantitative research. The study was conducted in the district of Kulon Progo Yogyakarta. The sources of the data in this study was kindergarten teachers. The data were collected through tests and questionnaires. The results of this study found that the categorization of the Playing aids variable shows that teachers use school facilities in high frequency (57.1%), moderate (28.6%), low (57.1%). The early childhood motor skill variable showed high motor skill (97.7%), moderate (1.8%), low (0.5%). Based on the findings of this study, it was suggested that the school should be able to provide and develop appropiate playing aids based on the age and growth of the children, which can be utilized in accordance with the need of developing motor skill.

Keywords: playing aids, early childhood motor skill

INTRODUCTION

Children are human beings who are growing and developing as well as having a personality different from an adult human. The differences in the form of physical and mental that has a unique character. The growth and development of children will run normally when creating a healthy environment. Science education has been growing rapidly. One of them is Early Childhood Education (ECD) that addresses education for children aged 0-6 years.

ECD conditions in Indonesia has not been well explored. This is due to an error in interpreting the pre-school education is not compulsory and is not important followed by each child. Here are the data of formal early childhood conditions in Indonesia in 2005 Dikdasmen (Slamet S , 2005:2): 1) The number of kindergarten 41 420 government 1 %, 2) Kindergarten civil servant Teacher 1 %, 3) The number Kindergarten of students 12.61 %, 4) Qualifications of linear teachers 10 %. In Kulon Progo Regency Kindergarten condition is also not much different. The total number of kindergarten is 321 with details of A 89 accredited, accredited accredited B 200 and C 32 (Dikpora, 2010).

On the behavior of modern life, the existence of common habits that cause children to be less movement. Lack of play environments safe, secure, and stimulating the growth and development of children is proper concern to parents and teachers. As a result, many children are less mobile due to just sit in front of the television or computer. Imam P Chairman of Conscience The World Foundation in an interview said, "Based on observation, I was concerned with the social and physical fabric of our society is becoming one of the inhibiting factors for our children to enjoy and reap the benefits of the basic activities that they desperately need, which is play."(Http :/ / www.cuplik.com).

Differences motion behavior is influenced by several factors including: individual, experience, and training (Gallahue and Ozmun, 2002: 45). Exercise through the utilization of the means to be one thing that can help the child's motor development. In some kindergartens, encountered some use was less plaything, while the child's motor ability in the final report (report book) still evolving.

The formulation of the problem to be solved in this study is: Is there a direct relationship between the school play facilities with early childhood motor skill?

Early Childhood Education

According to Law No. 20 of 2003 Article 1, Section 14 of the National Education System declare that early childhood education is an effort aimed at the development of children from birth to the age of six years are done through the provision of educational stimulation to assist the growth and development of the physical and spiritual readiness in order to have a child entering further education.

Early childhood education in the National Education Act No. 20 of 2003 Article 28, section 3 is expressed as a formal education is formed Kindergarten (TK), Raudatul Athfal (RA), or other equivalent forms.

According Sugiyanto and Sudjarwo (Sumantri, 2005: 12) psychic future kindergarten included in the early stages chillhood aged 1 to 6 years. While Jean Piaget put forward in this period included in the preoperational stage of concrete with a limited ability to receive stimulation (Masitoh, et al, 2005: 9).

Factors affecting motor development is nutrition, exercise and physical activity (Gallahue and Ozmun, 2002: 175). Motor skill development process will run with increased performance capabilities muscles through exercise habit. An early age is a good time to develop motor. Motor learning, early childhood emphasis on basic locomotor movements and basic motion nonlokomotor also developing manipulative movement and gymnastic abilities (Rae, P , 2000:64). Locomotor ability is also referred to as the body's ability to move from one place to another. Nonlokomotor ability is a movement that takes place as it stands, kiss knees, and sat (Rae, P ,2000: 106). While the manipulative ability and basic motor skills involve the entire object or basic motor skills involve the receipt and the return of the object (Rae, P, 2000: 113).

Dorothy E (2005: 13) classify the motor abilities of early childhood into two groups as described in the table below.

Table 1. Childhood motor skills Ability 4 to 6 years

Age 4-5 years	Age 5-6 years
1. The Child climbing stairs with alternating feet , but still down on the same foot on each pedal 2. Can turn while running . At the end of the year the child is able to run and stop at will , but can not be avoided 3. Trying to run fast , but might not succeed 4. Jumped 7-9 times 5. Can walk forward 2.5-3 meters above the beam width of 7.5 cm and backward as far as 1.5 m 1 .	1. Children began to dodge and move his feet to grow 2. Can run fast, start, and stop at will while running 3. Can jump 10 times or more 4. Can lope small, and at the age of 6 years will be jumping up and down with the ball at his feet 5. Could jump, reaching for something with his arm as high as 5-7.5 cm 6. Developed to run on top of the beam 3.3 meters wide and 7.5 cm backwards as far as 2.4 m 7. Rope or ladder to climb the pole, the child may be trying to climb a tree 8. Were able to do as far as 38-45 cm stepping, running, jumping as far as 70-88 cm, and ran to jump an obstacle as far as 23 cm.

1. Physical Characteristics of Early Childhood

Childhood has an age limit and understanding different, depending on the perspective used. Sofia Hartati (2005: 7) early childhood identified as an mini adult human, still innocent and yet can do nothing or in other words have not been able to think. Is a small human child who has the potential still to be developed. Kindergarten teachers need to know the specific characteristics of the foster children. By the time a child reaches the age of early stage there are clearly different characteristics infancy. The difference lies in appearance, body proportions, weight, body length and the skills they possess. Special features found in children ages Kindergarten (Aip Sarifudin, 1980: 28-29) are:

Bones skeleton

Growing of kindergarten children slower when compared with the growth rate in the age of 1 (one) up to 1 ½ (one half year). Bones of kindergarten still the cartilage. Until bones flexibility to prevent cracking, although a child often falls.

Growth of muscles

Muscle growth in young children is limited to large muscles. Some skills developing, ie with the use of the muscles of the arms, legs, and abdomen. The development of a variety of uneven motor skills. A child can be reduced interest and proficiency in a

particular skill while he shows progress in others.

Development of organs

The composition of organs of the child's body has matured enough, until habits should be; as in the case of eat, sleep, defecate, and so on (elimination) is sufficient. Children pay attention to the tools and their functions or work. Masturbation or masturbation (passion usually found in young men among adult and not be able to channel lust the passion in right place) in children often accompany such interest. Because of the relationship with the world outside the home more widespread, the likelihood of injury resulting from contact with another object will be more often, so the possibility of infection (infectious) can be increased.

Forms of Early Childhood motor skills

An early age is a good time to develop motor. In developing the child's motor skills will also be followed by other developments such as observing, remembering, memorizing, and others. In general views of muscle involvement in the motion are classified into two, namely:

a. Gross Motor Movement

Gross motor movements are skills that require most of the child's body (Victor G Simanjuntak, et al, 2008:6-23). This movement involves large muscles are coordinated. Developing gross motor movements than the first fine motor movements. So in principle, gross motor movement is a movement that involves large muscles. Gross motor function include large muscle activity, so that people can perform various movements required in hitting the tennis ball, hard sports, riding a bike or carrying loads (Mel Levine, 2002: 205).

b. fine motor movement

Fine motor movement is when the movement involves only certain parts of the body only and performed by such small muscles skills using hand and finger movements right wrist (simanjuntak Victor G, et al, 2008:6-23). The hallmark of fine motor movement is on the precision and accuracy of movement. Fine motor function include small muscle activity, especially in the hands and fingers (Mel Levine, 2002: 205).

3. Facilities Play

Play facilities are of natural or artificial equipment used to develop physical abilities and social, emotional and cognitive (Rae Pica , 2000: 279). Infrastructure and facilities are equipped to support the implementation of educational activities, care, and protection. Standard facilities and infrastructure include the type, completeness, and quality of facilities used in carrying out the process of the implementation of early childhood education (Permendiknas No. 58 of 2009 on the Standard ECD). Play facilities are provided with the aim to meet the needs of the students play.

Soegeng Santoso (Kamtini and Tanjung, 2005: 47) play is an activity or behavior that made the child alone or with a group using a tool or not to achieve a particular goal. Play is an activity that is carried out repeatedly and cause pleasure (satisfaction) for children to explore, discover, express feelings, creativity, and learning is fun. For the growth and development of children needed a play facilities that support. Corresponding game is a game that meets the needs of the child and in accordance with the characteristics of the child. The game should be useful to assist the growth and development of children one of which aspects of the motor. The students are expected to be stimulated and encouraged the development of his with a good play facilities.

a. Play Facilities of Motor

To develop the motor skills needed an early childhood stimulation. One of them provided facilities of playground equipment in the school environment. Principles infrastructure play, namely: (1) a safe, comfortable, bright, and meet the criteria for child health, (2) according to the developmental level of the child, (3) exploit the potential and the resources that exist in the surrounding environment, including waste

goods / secondhand. For ECD Formal Education Line or Kindergarten play facilities have minimum standards, namely: (1) a minimum land area of 300 m2, (2) the child has a living room with a ratio of at least 3 m2 per learner,(3) teachers' room, principal's office, UKS space, latrines with clean water, and other space activities relevant to the needs of the child, (4) have educational toys, made of teachers, children, and the plant, (5) has a game facilities both inside and outside the room can develop a variety of concepts, (6) has a literacy support equipment (Permendiknas No. 58 of 2009 on the Standard ECD).

Rae Pica (2000, 279) expresses the play area is needed to provide experience and develop early childhood movement. Appropriate playground equipment available for children to develop motor skills, among others: (1) tunnels is a game resembling tunnels holes or beam used to eksplore the movement to children both laterally and upwards through it, surround and infiltrate, (2) platforms is the game resembles that used to cross the bridge and aims to develop children's balance, (3) tires are game resembles a pulley used to encourage children to swing and move, (4) sand is a sandbox sand that is used to provide comfort in playing with the risk of falling, (5) riding is a dexterity game that gives experience to develop the ability of visual-motor skills, (6) slides is a game which is used to provide experience climbing and sliding, (7) swings a game that used to provide the experience of coordination abilities, muscle development, and a sense of swinging freely in the body, (8) balls is a tool to develop coordination skills, (9) hoops is a game to develop motion manipulation, (10) climbing structure) is a game arrangement for climbing rope or iron, (11) balance beams are made of board games and paved with sand used to train balance.

b. Facilities Tools Educational Games

Tedjasaputra (Kamtini and Tanjung, 2005: 61) defines educational toys is a game tool designed specifically for educational purposes. Educational toys optimally able to stimulate and attract children, and able to develop various kinds of potential child and used in a variety of activities. The characteristics of educational toys, namely: (1) can be used in a variety of ways, (2) is intended to be a preschool especially to develop the self,

safety, (4) Make the child actively involved, (5) constructive nature. Play facilities can be provided with good parenting when parents support towards the development of motor abilities of early childhood.

RESEARCH METHODS

The method used in this study is a survey method. This research looks at the relationship between the means playing with early childhood motor skills. Play facilities in schools are equipped to support the implementation of educational activities, care, and protection are in school Kindergarten.

Subjects in this study were young children aged four to six years who are enrolled in kindergarten. The study population was all students kindergarten level A and B, Kulon Progo Regency, Yogyakarta. The sample in this study is shown in Table below.

Table 2. List of Schools and Subjects Research

Number	School Name	Number of Students
1	TK PGRI Sentolo	36
2	TK ABA Kedundang	30
3	TK ABA Klayonan	34
4	TK PKK Depok	25
5	TK Negeri Pembina Panjatan	40
6	TK YM Tonobakal	29
7	TK ABA Tawangsari	25
Number		219

The instrument used in this study is a questionnaire and tests. Questionnaire instrument is used to uncover along with the indicator variable for the utilization of play. Test instruments used to reveal the indicator variables along which motor abilities of early childhood. To test the validity of the instrument, in this study using the formula of Pearson product moment correlation (Sugiyono, 2005: 213). Suharsimi said for this reliability test using the formula Alpha (2002:171).

RESEARCH RESULTS AND DISCUSSION

To determine the trend of the average expectations of the results of measurement used as comparison criteria were divided into three categories.

Table 3. Research Variable Frequency Distribution Table

Variable	Category	Score Interval	Frequency	%
Means of School	High	$66 < x$	8	57,1
	Medium	$44 < x \leq 66$	4	28,6
	Low	$x < 44$	2	14,3
	Number		**14**	**100**
Motor Ability	High	$103 < x$	214	97,7
	Medium	$76,5 < x \leq 103$	4	1,8
	Low	$x < 76,5$	1	0,5
	Number		**219**	**100**

Description: x = the total score for each subject of study

SEM results showed coefficients of direct and indirect relationship to early childhood motor skill that can be seen in the following table.

Table 4. Direct and Indirect Relationships Research Variables

Variable	Direct Relationship	Indirect Relationship	Total Relations
means playing with early childhood motor skill	0,054	1,246	1,300

Based on the table above, there is a direct relationship between the facilities playing with the motor skills of 0,054 early childhood as well as the above calculation shows that the direct correlation of 0.054 is smaller than the indirect relationship was 1,246. This means indirect relationship between motor skills means playing with early childhood have a higher impact.

Based on path analysis the relationship between variables, it can be discussed as follows.

there is a direct relationship between the means playing with early childhood motor skills. This is in accordance with the opinion of Eric Strickland (2004) in his article suggests play using play facilities such as pipelines for dancing, will be helpful for children kindergarten explore yourself and good for basic motor movement. This suggests that the role of play facilities are very helpful in the development of motor skills of children. Based on the relationship path coefficient (0.054), the direct relationship between the level of play facilities with early childhood motor skill is higher than the direct relationship of parents' parenting variables, but is still lower when compared to the direct relationship of teacher self-concept variables and relationships indirectly from all study variables.

there is no direct relationship between the means playing with early childhood motor skills through parenting parents . Based on the above description of the relationship lines indicate the importance of the availability of good play that will provide comfort and safety for children typed play. Educational toys are available in the school can provide a stimulus to spur the development of motor abilities of early childhood.

CONCLUSION

Based on the results of the data analysis and discussion, it can be concluded that the facilities have played an indirect relationship that is higher than its direct relationship.

The results of this study is an input for teachers and policy makers and practitioners of early childhood associated with the development of motor skills. It is suggested that the School should be able to provide and develop play facilities in accordance with the age and growth of early childhood development. Play facilities can be utilized in accordance with the need to develop a child's motor skills.

REFERENCE

Aip Sarifudin. 1980. *Olahraga Pendidikan Untuk Taman Kanak-Kanak.* Jakarta: Departemen Pendidikan dan Kebudayaan.

Dikpora. 2010. http://www.pendidikan-diy.go.id/?view=baca_isi_lengkap&id_p=8. download tgl 1 Desember 2010 jam 10.15

Enion, Dorothy. 2005. *Permainan Cerdas Untuk Anak Usia 2-6 Tahun: Musik, Lagu, dan Tarian; Kata-kata dan Angka; Seni dan Keterampilan.* Jakarta: Erlangga

Strickland, Eric. 2004. Developing Motor Skills-Dramatically!. *Scholastic Early Childhood Today.* New York: Vol. 19, Iss. 3; pg. 9, 1 pgs. http://proquest.umi.com/pqdweb?index=39&did=730767601&SrchMode=1&sid=11&Fmt=4&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1309923752&clientId=68516. di *download* tgl 6 Juli 2011 jam 09.15

Gallahue, D, L, dan Ozmun, J,C. 2002. *Understading Motor Development Infant, Children, Adolescents , Adults.* New York: Mc Graw Hill

Kamtini dan Husni, W. T. 2005. *Bermain Melalui Gerak dan Lagu di Taman Kanak-Kanak.* Jakarta: DEPDIKNAS

Levine, Mel. 2002. *A Mind at a Time: Menemukan Bakat Istimewa Anak, Mengatasi Kesulitan Belajar di Sekolah dengan Memahami Perbedaan Cara Belajar Anak.* Jakarta: Gramedia

Masitoh, dkk. 2005. *Pendekatan Belajar Aktif di Taman Kanak-Kanak*. Jakarta: DEPDIKNAS

Peraturan Menteri Pendidikan Nasional No 58 tahun 2009 tentang Standar Pendidikan Anak Usia Dini

Pica, Rae. 2000. *Experiences in Movement With Music, Activities, and Theory: Second Edition.* Canada: Delmar Thoson Learning

Slamet Suyanto. 2005. *Dasar-Dasar Pendidikan Anak Usia Dini.* Yogyakarta: Hikayat

Sofia H. 2005. *Perkembangan Belajar Pada Anak Usia Dini.* Jakarta: DEPDIKNAS

Sugiyono. 2005. *Statistika Untuk Penelitian*. Bandung: CV Alfabeta

SuharsimiArikunto.2002. *Prosedur Penelitian Suatu Pendekatan Praktek Edisi Revisi V.* Jakarta: Rineka Cipta.

Sumantri, MS. 2005. *Model Pengembangan Keterampilan Motorik Anak Usia Dini.* Jakarta: Depdiknas

Undang-undang Sistem Pendidikan Nasional tahun 2003. http://www.pendidikan-diy.go.id/file/uu/uu_20_2003.pdf. download tgl 1 Desember 2010 jam 10.20

Victor G Simanjuntak. 2008. *Pendidikan Jasmani dan Kesehatan.* Jakarta: Direktorat Jenderal Pendidikan Tinggi Departemen Pendidikan Nasional