PROCEEDING

4TH INTERNATIONAL CONFERENCE OF PHYSICAL EDUCATION AND SPORT SCIENCE

"HEALTH PROMOTION THROUGH PHYSICAL ACTIVITY, PHYSICAL EDUCATION, SPORTS SCIENCE AND TECHNOLOGY: GLOBAL AND INDOONESIAN PERSPECTIVE"

JAKARTA, MAY, 20-22TH 2015
UNIVERSITAS NEGERI JAKARTA
Physical education in the past four decades has undergone a transition from a profession with an emphasis on traditional sport skill acquisition to one with a broader emphasis on health related fitness and lifelong physical activity. During the same time period, the epidemic of overweight and obesity has world-wide implications and rapidly emerged in developed countries and is now emerging in developing countries. A major contributing factor to this issue has been shifts in both the dietary and activity patterns of individuals. This workshop would present research evidence and practical examples including Brain Breaks to draw the linkage and application of a holistic health and physical education model and interactive technology as one of the possible means of combating global epidemic of overweight and obesity.
CONTENTS

Speech by Advisor Committee of ICPESS 2015 ------------------------ 1
Opening Speech by Rector Universitas Negeri Jakarta --------------- 3
Speech by Dean of Sport Science Faculty Universitas Negeri Jakarta - 4
Speech by Chairman of the ICPESS 2015 Committee ------------------ 5
Programme ---------------------------------------------------------- 6

KEYNOTE SPEAKERS

Modern Athletes: Are We Breeding Giants and What are the Health Consequences?
Prof. Dr. Hans DE RIDDER

Health Promotion through Physical Activity - Current Global Developments and Practical Examples
Prof. Dr. Gudrun DOLL-TEPPER

Inflammation and Chronic Disease: Implications for a Physically Active and Fit Lifestyle
Prof. Dr. Larry DURSTINE

Lifelong Health Benefits from Physical Activity with Linkage to Medical Science: A Cardiologist Perspective
Prof. Dr. Stephen L. KOPECKY, M.D.

Improving the Quality of Physical Education and Sport in an Indonesian Education Setting
Professor Toho Cholik MUTOHIR

WORKSHOP

Global New Direction of Physical Education, Physical Activity and Health: A Possible Mean through Interactive Technology
Prof. Dr. Ming-kai Chin
INVITED SPEAKERS

Physical Education and Health in Opinions and Lifestyle of East European Young Generation
Prof. Dr. Branislav ANTALA

Promote Lifelong Bone Health through Physical Activity and Sport: A Biomechanist Perspective
Assist. Prof. Dr. Siriporn SASIMONTONKUL

How Dependent Upon Environment Are We for Our Physical Activity and Health
Prof. Dr. Peter SCHANTZ

Better Coaching and Conditioning Techniques for Youth to Produce Upcoming Stars
Assoc. Prof. Dr. Gurmeet SINGH

Challenge for Physical Education in Indonesia: Today and in the Future
Prof. Dr. Tandiyo RAHAYU

Promotion of Health through Motor Exercises, Cognitive Training and Affective Relations – a Social Historical Point of View
Prof. Carla ANAUATE

Detection of psycho-educational needs of children with congenital Heart Disease for Promotion of Health: Perspective from Hospital Pedagogy
Prof. Dr. Verónica VIOLANT

Health Promotion through Sports Mega-Events: legacies from the FIFA World Cup 2014 in Sao Paulo, BRAZIL
Assoc. Prof. Dr. Ricardo Ricci Uvinha

Psychological Health and Injuries in Collegiate Athletes: Antecedent or Consequence?
Assoc. Prof. Dr. Jingzhen (Ginger) YANG

Antioxidants: Their Role in Health and Sports Performance
Dr. Chee Keong CHEN

22
24
26
28
30
32
34
36
38
40
The New Dimension in Training Rugby Referee: Sharing The Experience Of Malaysian Rugby Union.

Lt. Col. (PA) Dr. Mohamad Nizam Bin Nazarudin

Infusion of Instructional Technology for the Teaching of Physical Education in a Selected School in Singapore

Assoc Prof. Dr. Govindasamy BALASEKARAN & Kia Wang PHUA Principal,

The History of the Promotion of Sports in the Soviet Union and Modern Russia

Prof. Dr. Elena A. ISTIAGINA-ELISEEVA

Integration of the Virtual Tour System with a Web-based Blended Teaching Course Design to Enhance Students’ Self-learning in Movement Studies

Assoc. Prof. Dr. Shihui CHEN

The New PE Curriculum in Turkey: Context of Society with the Culture of Movement and Health

Prof. Dr. Giyasettin DEMIRHAN

Intersectiions Among Government, Teacher Education, and K-12 Schools in Relation to Children’s Health: An Ecological Systems Theory Perspective

Prof. Dr. Kim GRABER

Worksite Health Promotion -Challenges in India

Prof. Dr. Gulshan KHANNA

Nutritional Ergogenic Aids and Dietary Supplements for Antioxidation of Female Bodybuilders in Asia

Assist. Prof. Dr. Margaret Jip KUO

Croatian Perspectives of Integrated Physical Education: From Theory to Practise

Dr. Dario NOVAK

Bone Turnover in Response to Nutritional Supplementation and
Exercise Intervention in Women  
Dr. Foong Kiew 001  

FUTURE LEADER VOLUNTEER  
Zorniza Plamenova MLADENOVA PhD (Bulgaria)  
hrvoje PODNAR Assist. Professor (Croatia)  
Nurul Ain Abu KASIM (Malaysia)  
Nur Atiqah Wadiah Binti AZMI (Malaysia)  
Dr. Badriya Al-HADABI (Oman)  
Dianna THOR (Singapore)  
Gabriela OLOSOVÁ (Slovakia)  
Mesut KARLIK (Turkey)  
Dr. Fatma SAÇLI UZUNÖZ (Turkey)  
Tholumusa Favoured MLALAZI (Zimbabwe)  

POSTERS  

PARTICIPANTS  
THE DASH-STUDY: DISEASE, ACTIVITY AND SCHOOL CHILDREN'S HEALTH  
Uwe Pühse  

THE EFFECT OF VISUALIZATION AND MOTORIC ABILITY ON LEARNING RESULT OF BADMINTON SKILL  
James Tangkudung, Wahyuningtyas Puspitorini  

META-ANALYSIS STUDY ABOUT THE INFLUENCE OF TRANS FATTY ACIDS INTAKE ON URBAN CITIZENS HEART RATE IN AEROBIC EXERCISE  
Chen Hai Rui, Wu Ting  

(KOPPENSI) FACULTY OF SPORT SCIENCE STATE UNIVERSITY OF JAKARTA 2014  
Hendro Wardoyo  

INTEGRATION OF PHYSICAL FITNESS LEARNING MATERIALS IN JUNIOR AND HIGH SCHOOL BASED ON CURRICULUM 2013 IN PHYSICAL EDUCATION SPORT AND HEALTH  
Ahmad Rithaudin  

THE EFFECT OF 4-WEEK ACTIVE STRETCHING ON HAMSTRING
FLEXIBILITY
Preena Gunasegeran, Syaidatul Suhada Musbah, & Lim Boon Hooi

PHYSICAL EDUCATION LIFELONG EDUCATION OF PRIMARY SCHOOLS GENERAL TEACHERS
LUBOR TOMÁNEK – BRANISLAV ANTALA

SPORTING ACHIEVEMENTS RAISE THE DIGNITY OF THE NATION
Ibrahim

IMPROVING ATHLETE’S MOTIVATION THROUGH MENTAL TRAINING TREATMENT
Kurnia Tahki & Awaludin

LEVEL OF TEAMWORK THROUGH THE LOW IMPACT GAMES
Fajar Vidya Hartono, Ahmad Faraitody, Fitrah Ramadhan

INFLUENCE STYLE OF TEACHING AND LEARNING MOTIVATION TO LEARN THE GRAB START TECHNIQUE ON STUDENT OF SWIM SPORT PENJASKESREK UNSIKA
Ruslan Abdul Gani

META ANALYSIS OF THE EFFECTS OF YOGA EXERCISE ON BALANCE ABILITY FOR PEOPLE OF SENIOR AGES
Wu Ting, Chen Hai Rui

THE RELATIONSHIP BETWEEN OSTEOPOROSIS AND PHYSICAL ACTIVITY, BODY MASS INDEX, LEG MUSCLE STRENGTH, GENDER AND AGE GROUPS 40-50, 51-60, 61-70 YEARS.
Yoga Pramana, Nia Sri Ramania, Tommy Apriantono

EVALUATION PROGRAM OF DEVELOPMENT AND TRAINING CENTER SPORTS STUDENTS (PPLP) in YOGYAKARTA.
Moch. Asmawi & Surono

COMBINATION EFFECT OF SELF-TALKING AND MENTAL IMAGERY FUNCTIONS ON BADMINTON SKILLS ACQUISITION AND SELF CONFIDENCE ON BEGINER STUDENT-ATHLETES
Yusuf Hidayat Didin Budiman & Alit Rahma

SATISFACTION OF THE WATER IN THE OCEAN PARK WATER
ADVENTURE BUMI SERPONG DAMAI (BSD) AND SNOWBAY WATER PARK, TAMAN MINI INDONESIA INDAH (TMII) 
Noji Marlina Siregar, Graysia Maulana

144

DRIBBLE LEARNING MODEL WITH APPROCHING PATTERN PLAY FOR PHYSICAL EDUCATION (2014) 
Nurkadri

152

HEART RATE AND LACTIC ACID (LA) RESPOND TO SPORTS MASSAGE FOR WHEELCHAIR BASKETBALL ATHLETES 
Siti Sakinah Ismail & Anuar Suun

153

ACCESSIBILITIES AMONG PEOPLE WITH PHYSICAL DISABILITIES IN PUBLIC RECREATIONAL PARK 
Mohd Rosli Norfaezah, ONG Tah Fatt, KEE Kang Mea

154

STANDARDIZATION OF QUALIFICATIONS FOR OUTBOUND FACILITATOR 
Iwan Barata & Desi Asrianti

155

LOOKED POSITION OF WOMEN IN SPORT (CONTROVERSY BETWEEN ACHIEVEMENT OR EXPLOITATION SEXUALITY) 
Ruslan

161

PUBLIC ACCEPTANCE TOWARDS PARTICIPATION OF DISABLED PEOPLE IN PHYSICAL ACTIVITY 
Abdul Rasid Aida Roha., ONG Tah Fatt., Wahidah Tumijan

168

THE RELATIONSHIP BETWEEN PHYSICAL FITNESS AND HEALTH PROFILE, AND ACADEMIC ACHIEVEMENT 
Didi Sunadi, Andreanus A. Soemardji, Tommy Apriantono, and Komar Ruslan

183

SPORT AND POLITICS: INTERNAL PROBLEM IN THE INDONESIAN FOOTBALL ASSOCIATION (PSSI) 
Aan Wason

184

VALIDATION OF ADAPTED BAHASA MALAYSIA VERSION OF THE EXPECTANCY VALUE MODEL OF ACHIEVEMENT CHOICE QUESTIONNAIRE
Chin Ngien Siong, Jecky Misieng, Teo Eng Wah, Hamsiah Masni

EORTS TO INCREASE OF LEARNING OUTCOME OF BADMINTON FOREHAND SMASH PUNCH BY USING MINI RACQUET
Khaeroni

REDUCING THE AGGRESSIVE BEHAVIOR OF ADOLESCENTS THROUGH SPORT FOR PEACE TRAINING PROGRAMME
Hartman Nugraha & Deandra W.F

RELATIONSHIP OF HAEMOGLOBIN CONCENTRATION WITH MAXIMAL AEROBIC CAPACITY AT ATHLETES INDONESIAN
Junaidi

DETERMINANTS OF ONLINE SHOPPING INTENTION AMONG SELANGOR FOOTBALL FANS
Rozalinan Jepiridin., ONG Tah Fatt.

THE EFFECT OF RELAXCITION TRAINING PROGRAM TO STRESS ESPECIALLY PHYSIOLOGY REACTION (STUDY OF ITB STUDENT)
Nia Sri Ramania, Tommy Apriantono, Maria Immaculata Iwo, Samsul Bahri, Sri Wachyuni

FREESTYLE SWIMMING LESSONS THROUGH PLAYING METHOD
Abdul Sukur & Alexander Kurniawan

INFLUENCE OF MENTAL TRAINING IN DECREASING ANXIETY OF PERTAMINA SOCCER SCHOOL’S PLAYERS
Hadi Rahmaddani & Bekti Prasetyo

MEASURING KINESTHETIC INTELLIGENCE FOR CHILDREN
Eva Julianti

THE GAiT VARIATION TREND OF MIDDLE AGED AND ELDERLY PEOPLE DURING STAIR NEGOTIATION
GU Houxin

CONTRIBUTION TO THE IMPLEMENTATION OF SPORT SCIENCE IN BADMINTON TRAINING CENTERS JAKARTA
Ika Novitaria
A CORRELATION OF PHYSICAL CONDITION, BASIC TECHNIQUES OF SHOOTING AND MENTAL EXECUTION FOR SHOOTING ABILITY OF IBL (INDONESIAN BASKETBALL LEAGUE) PLAYERS 2010
Iman Sulaiman Zamzami

IMPACT OF PHYSICAL EDUCATION AND SPORTS PROGRAMS ON CHILDREN’S PSYCHOLOGICAL STATES IN DISASTER-PRONE AREAS
Soni Nopembri, Saryono, and Yoshio Sugiyama

EFFECT OF METHOD OF PLAYING THE IMPROVEMENT OF BASIC SWIMMING ABILITY TO STUDENT SD ISLAM AL-AzhAR KELAPA GADING NORTH JAKARTA
Hernawan

EFFECT OF EXERCISE PLYOMETRICS AND ACHIEVEMENT MOTIVATION ABILITY TO KICK SICKLE BRANCH IN SPORTS PENCAK SILAT
Widiastuti & Ramdani Amrullah

STUDY OF DIMENSIONS OF FLOW STATE OF BADMINTON PLAYERS
Gurmeet Singh & Mr. Neeraj Malik

THE IMPACT OF THE HEALTH ASPECTS OF PHYSICAL ACTIVITY AND PARTICIPATION IN THE LABOR PRODUCTIVITY OF STAFF OF THE UNIVERSITY PUTRA MALAYSIA
Mohd Radzani Abdul Razak, Mohd Firdaus Bin Abdullah, Wan Ahmad Munsif Bin Wan Pa, Omar Wahyuddin Ahmad, Muhamad Iqbal Ismail

THE EFFECT OF ARCH INDEX AND FATIGUE ON STATIC BALANCE IN SCHOOL CHILDREN AGED 9 TO 11 YEARS
Riza Adiryan, Tommy Apriantono, Supriyanto

THE EFFECT OF PLYOMETRIC AND MAXEX TRAINING METHOD ON EXPLOSIVE POWER OF KICKING IN PENCAK SILAT AT FIK-UNJ

Proceeding 4th International Conference of Physical Education and Sport Science 2015
Johansyah Lubis

DEVELOPMENT OF MODEL SETTING VOLLEYBALL FOR JUNIOR HIGH SCHOOL
Yusmawati, Firmansyah Dlis, Khurotul Aini

PROFILE ANTHROPOMETRY ATHLETE PETANQUE FACULTY SPORT SCIENCE STATE UNIVERSITY OF JAKARTA
Ramdan Pelana & Amelia Triandini

IMPROVING STUDENT CREATIVITY MOTION IN PHYSICAL EDUCATION LEARNING THROUGH SMALL GAME
Andi Ali Saladin

AGGRESSIVENESS IN SPORTS IN MALAYSIA, CAUSE AND RECOMMENDATIONS ABOUT IT
Mohd Firdaus Bin Abdullah, Wan Ahmad Munsif Bin Wan Pa, Omar Wahyuddin Ahmad, Muhamad Iqbal Ismail

DEVELOPMENT OF PENCAK SILAT CINGKRIK TRADITIONAL BETAWI
Nur Ali

ANALYSIS OF SKILL PHYSICAL FITNESS LEVEL PLAY SOCCER GASIBA DISTRICT BULUKUMBA
Benny B

APPLICATION OF MENTAL TRAINING TO INCREASE SPORT-CONFIDENCE OF JUNIOR SOCCER PLAYER
Juriana, Rian Agus Setiawan

THE EFFECTIVENESS OF TEACHING GAMES FOR UNDERSTANDING (TGFU) IN IMPROVING THE HOCKEY TACTICAL SKILLS AMONG SCHOOL BOYS IN MALAYSIA
Wee Akina Sia Seng Lee, Shabeshan Rengasamy, Lim Boon Hooi

PHYSICAL EDUCATION POLICIES IN EDUCATION
Liliana Puspasari
THE CORRELATION BETWEEN FREQUENCY OF EXERCISE AND POSTURAL ORTHOSTATIC TACHYCARDIA SYNDROME (POTS) IN YOUNG WOMAN
Ratna Kusumawati & Heru Sulastomo

EXERCISE BASIC MOTION ATHLETICS IN PLAYING FOR FORMING QUALITY BASIC MOTION CHILDREN
Deni Irawan

COMMUNICATION SKILL FOR SPORT DEVELOPMENT IN INDONESIA
Zulham

ANALYSIS PROSPECTIVE PHYSICAL EDUCATION TEACHERS OF KNOWLEDGE PEDAGOGICAL
Susilo & Boy Adam Manopo
THE EFFECT OF VISUALIZATION AND MOTORIC ABILITY ON LEARNING RESULT OF BADMINTON SKILL

James Tangkudung, Wahyuningtyas Puspitorini

Faculty of Sport Science, Jakarta State University, Indonesia.

ABSTRACT

This research aimed to find (1) the effect of teaching methods and visualization of the results of badminton skills, (2) the effect of high and low motoric skills to the badminton skills learning outcomes, (3) interaction between motoric skills teaching methods and the learning outcomes badminton skills. This research used experimental method to design a 2x2 factorial design. The number of samples in this study were 61 students. Data collection techniques with rope badminton skills tests. Data analysis technique is the analysis of variance (ANOVA) at a significance level of $= 0.05$. The study concluded that (1) there was no difference in the effect of conventional teaching methods and visualization of the badminton skills learning outcomes, but especially on short service skills there were significant differences. (2) There was no difference in the effect of high and low motoric skills to the badminton skills learning outcomes. (3) There was no interaction between motoric skills teaching methods and the badminton skills learning outcomes.

**Keywords:** Visualization, motoric abblility, badminton skills

A. Introduction

With the teaching approach, student’s learning activity is expected to develop together with teacher’s teaching activity. According to Sudjana (1991 : 76), a good teaching approach is an approach which can develop student’s learning activity. A good learning an teaching process had better uses various types of teaching approach alternately or the different types support each other.

Fits and Posner (1967) explains three stage model, namely: (1) Cognitive Stage, (2) Associative Stage, and (3) Autonomous Stage. Cognitive Stage is an early and short stage in motion learning. In this stage, student is expected to understand what to do. Associative Stage is a medium stage and a longer stage than cognitive stage. In this stage,
student is expected to do skill motion, focus on improving skill and accuracy through the mastery of basic skills. Autonomous Stage is an expert stage or the motion is automatically without thinking of it first. so formulation of the Problems as follows: (1) Are there any differences between conventional teaching method and visualization teaching method towards the learning result of badminton skill? (2) Are there any differences between high motoric ability and low motoric ability towards the learning result of badminton skill? (3) Is there an interaction between teaching method and motoric skill towards the learning result of badminton skill.

B. Theoretical Framework
1. Badminton Skill

To be a good badminton player, an athlete should master basic techniques of playing badminton correctly. Basic techniques mentioned is not only hitting technique mastery, but also involve other techniques related to badminton. Basic techniques which should be mastered by the players are stance, racket gripping technique, strokes, and footwork.

a. Stance
Stance can be divided to three forms, which are (1) stance when serving the shuttlecock, (2) stance when receiving the shuttlecock, (3) stance when playing.

b. Racket gripping technique
The good way of gripping racket is using the fingers, not the palm. By using the fingers, it will allow you to move racket freely. There are several types of racket gripping; America grip, backhand grip, and combination grip.

c. Strokes
To master basic techniques there are rules that have to be followed during the practice to master a good skill level, such as service, short service, long service, clear, smash, drop shot, drive, and netting.

d. Footwork
In badminton, foot functions as the body buffer to move anywhere fast. The basic principal of footwork in badminton is that foot should be in line with the hand used to grip the racket when hitting the shuttlecock; when hitting the shuttlecock the foot always at the same direction as the hand. For example, when your hand hit the shuttlecock towards the front of the net, hence in the last appropriate foot step the hand should be at the front. It goes the same way when you hit the shuttlecock in the back area hence the appropriate footstep the hand should be at the back.
Practice to master footwork is to make yourself get used to it because the quality of the good footwork is determined by the rhythm and precision of your step. Hence, to be able to master the expected quality is to practice as often as possible. Here are the models of footwork practice: badminton shadow step, stroke, foot strengthening, reaction, acceleration, agility, speed and coordination of movements. Forms of practice can be in the form of taking the shuttlecocks that are placed in the edges of the field and move them to the center of the field, or vice versa, or move by mimicking the movement of the model (partner during practice), coach’s commands, lamp signal, and so on.

2. Motoric Ability

According to Kirkendall, motoric ability is a general form of someone’s abilities that will result in top achievement if they are developed specifically. The general abilities mentioned above include speed, muscular power and endurance, power, kinesthetic, coordination of eyes-hands, coordination of eyes-feet, agility, flexibility, timing, and sensory motor rhythm. Someone’s motoric ability is an actualization of the abilities he/she has since kids. Motoric ability is related to the implementation of a movement or demonstration of skills that are related to each other and relatively has been had by someone since he or she was a kid. Biological factor is considered to have much effect as the main strength that can affect someone’s basic motoric ability. According to Rusli Lutan, motoric ability serves as a basic in the development of ability and skill owned by someone.

Magill as cited from Fleishman said that individual’s ability in learning certain skills is broadly determined by the level of skills of perception and motoric skill. Fleisman identifies someone’s level of skills into 11, as follows: (1) coordination of body parts, (2) control’s precision, (3) response orientation, (4) reaction time, (5) speed of hands’ move, (6) speed’s control, (7) hands’ dexterity, (8) stability of hands and arms, (9) fingers’ dexterity, (10) speed of wrist and fingers, and (11) aims.

Fleishman also divides motoric ability to 9 classifications, as follows: (1) static strength, (2) dynamic strength, (3) explosive strength, (4) standing still strength, (5) stalling flexibility, (6) dynamic flexibility, (7) the entire body coordination, (8) the entire balance, and (9) endurance. So, motoric ability owned by someone can be viewed as basic success in implementing motoric skills duty, as well as to help the concerned students in learning and the lecturers in deciding the teaching method which should be applied to achieve the expected goal. The better the
motoric skill the students have, the better motoric ability they have in implementing lay-up skill motoric duty hence they can achieve higher outcomes. In summary, the students' motoric ability has close relationship with the achievement of motoric learning outcomes.

In this research, the referred motoric ability is the general motoric ability which focus on the performance of certain sports' skills. Skill here means completeness that facilitate the performance in various of skills. To decide whether the motoric ability of students is high or low, we can use Barrow General Motor Ability Test, which are: (1) long jump without start, (2) 'soft ball' shuttlecock throwing, (3) zig-zag run, (4) throwing shuttlecock to walls, (5) medicine shuttlecock throwing, and (6) 55 meters sprint.

3. Motoric Learning

According to Singer, motoric learning is relative change of behavior in performance or behavior potential that is a learning result or performance to a better situation. Based on the opinion above, motoric learning is a learning form or a process which the purpose is to improve the motoric quality.

According to Suyudi, to give a new knowledge, up to experience and skill, it is necessary to form because it does not happen by chance. However, to form someone to have a new motoric skill can actually be developed based on what had been developed before or based on the experience that had been experienced by someone. The more experience someone has regarding various movements, the better their movements control is and the easier they learn about new movements.

Therefore, students' experience and knowledge regarding the motoric can be programmed by noticing studying principles and systematic practice. In regards to that matter, Yanuar Kiran said that motoric learning is internal change in motoric form which every individual has which is concluded by the permanently relative achievements development and all are results from practice.

In learning and teaching motoric, what needs to be noticed is the motoric ability that supports the skill component itself. Hence when all supporting components can be optimized, the expected good and correct motoric skill will be achieved. According to Verduci, the other levels or classifications that include behavior in the process of skill mastery, include: (1) general motoric, (2) coordination motoric, and (3) creative motoric.

4. Visualization

Visualization practice is a practice in athlete's minds,
which the athletes create movements through imagination and implement them after making sure that those will work. Visualization practice can mean three things; those that can be seen or visual, those that can be heard or auditory, and those that can be felt or kinesthetic (Poster and Foster, 1986). Here are the ways to self-visualized according to Poster and Foster (1986), as follows:

a) See, listen, and feel your performance when you do sports.

b) Take notes or record using a recording devices every detail that you see, listen, or feel.

c) Start directly when you arrive in the arena of competition, do warming up routinely, and few minutes before starting the competition.

d) Enter and learn about the living pictures in details about your events or numbers and experience concerning weather, colors, smells, and sounds of people (noise), temperature, and air.

e) Besides making details, imagine yourself in a relax situation, believe in yourself and control your body and mind perfectly.

f) Do all self-events, sights, feelings, and hearings at every important point at the event.

g) After finishing your event, write down relaxation statements and remember your own trust, freshness level, and tenacity or strength of your own mentality.

h) Write down everything in your notes, read again, and fix it.

i) Pay attention to your weakness, make changes in notes, and if it is satisfying, you can write down progressive relaxation parts which you feel relaxing and follow the notes which you have adjusted.

j) Listen to what you want to achieve several times (at least once a day) before any competitions.

Entering behavior and learning basic condition are important factors to learn new motoric skills. Motoric skill learning is divided to three stages; cognitive, fixation, and automatic stages. In cognitive stage, the influential feedbacks are extrinsic and external, while in fixation and automatic stages, the influential feedbacks are intrinsic combination and external.

The method which can be used to strengthen the feedbacks of the motoric skill learning that will be learned is “visualization” method. This method can strengthen the feedbacks especially on the duties’ complexity and duties management of the skills which will be taught.
1. The Effect of “Conventional-Visualization” Teaching Method on The Learning Result of Badminton Skill.

The presentation skill in skill learning is the combination between stages of motion learning and instructional technique and strategy which enable students to exercise the taught skill easily. The more appropriate the used method is, the easier it is for students to learn the skill. More opportunity to exercise enables students to be more skillful.

The learning process in autonomous stage enables students to obtain exercise experience to improve and harmonize the motion so that the motion is performed unconsciously. They get longer informative feedback about the motion completely so that visualization presentation is considered more effective. The benefits of visualization presentation are: (1) seen from exercise law, they get stronger understanding to remember learning assignment because of the optimization of some senses, (2) they get more opportunity to use knowledge about the feedback, (3) they are faster in getting the insight, (4) they get more references to take decision easily.

The framework of thinking is leading to an assumption that the effect of visualization presentation is more effective than the one without visualization (conventional) towards the learning result of badminton skill.

2. The Effect of Motoric Ability on the Learning Result of Badminton Skill

Students with higher motoric skill will have a potential to perform better motion skill compared to students with lower motoric skill. In other words, students with high motoric ability will master motion skill fast in badminton skill. Students with lower motoric skill have less potential in learning process to master complex motion skill. Students with low motoric ability takes longer time compared to students with high motoric skill. With such characteristic, visualization method is appropriate to use for students with low motoric ability. Therefore, it can be assumed that badminton skill learning with visualization method is more effective than conventional method for students with lower motoric ability. Conventional teaching method and visualization teaching method have different characteristics. In its implementation, visualization teaching method emphasizes on giving lesson material by strengthening motion concept. It is important to master complex lesson material. In this case, one’s motoric ability doesn’t influence the learning of motion skill dominantly.
3. Interaction between Visualization Method with Motoric Ability

Visualization in its principle is very effective in strengthening the concept in cognitive stage of skill learning. The effectiveness in this stage influences more effectively in fixation stage. From that principle, visualization is learning strengthening engineering through the effectiveness of giving stimulus to students' senses. In this research, students with lower motoric ability had better get visualization because through that method lesson material can be given in such a way so that students with lower motoric ability can follow it well.

Research Hypothesis
1. There is a difference of the learning result of badminton skill between visualization teaching method and conventional teaching method.
2. There is a difference of the learning result of badminton skill between students with higher motoric ability and students with lower motoric ability.
3. There is an interaction between teaching method and motoric ability towards the learning result of badminton skill.

C. Methodology

The method used in this research is an experimental method, namely, a method using experiment and treatment activities. By the treatment, the causal relationship from given treatment implementation is seen. The design used in this experiment is 2 x 2 factorial. The samples are 61 male students.
### Table 1. Research Design with 2 x 2 Factorial

<table>
<thead>
<tr>
<th>A: Teaching Method</th>
<th>“Conventional”</th>
<th>“Visualization”</th>
</tr>
</thead>
<tbody>
<tr>
<td>B: Motoric Ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High (B1)</td>
<td>A1B1</td>
<td>A2B1</td>
</tr>
<tr>
<td>Low (B2)</td>
<td>A1B2</td>
<td>A2B2</td>
</tr>
</tbody>
</table>

The population of this research is male students of Sport Education Faculty of UNS Surakarta. The technique of sample taking is by randomized group design in this way: students are given motoric ability test, then they are ranked based on the result. The data needed in this research are: (a) data of students’ motoric ability, and (b) data of the learning result of badminton skill. Barrow General Motor Ability Test is used to get the data of motoric ability. While Verducci badminton skill test set is used to get data of the learning result of badminton skill.

The analysis technique in this research is variant analysis (ANAVA) and is followed by Turkey Testing with significance $\alpha = 0.05$.

This research is done in Faculty of Sport Education of UNS Surakarta.

### D. Discussion

The result of hypothesis testing shows that both methods are not different. It means that research hypothesis is not proven. It is possibly due to some obstacles during the research experiments. Several factors which are assumed to fail the hypothesis are:

1. Time of experiment implementation is limited in subject schedule of badminton practice is 90 minutes, once a week, 16 meetings, so that the frequency to master complex badminton skill is still low. In the calculation of short serve result is proven to have significant difference.

2. The use of chicken feather shuttle cock determines the result of badminton skill test. Chicken feather shuttle cock moves slowly so that the test types with far distance point (back side of the court), such as, long serve, smash, da, lob and need more power (it adds to the difficulty of the test to get high score).

3. Less standard of rackets and string used in the exercise because students use their own rackets.

4. It results in low score in the evaluation of the learning result of badminton skill so that it influences the research result.

### E. Conclusion

The conclusion of this research taken from research result and
interpretation is There is no significant difference between conventional and visualization group in the learning result of badminton skill. In the testing of short serve which has simple technical mastery, visualization has better compared to one without visualization.

From the result of the conclusion of this research, it is suggested to review the use of visualization method by adding the frequency treatment implementation at least three times a week in three months. It may result in the change of vascular adaptation effect and it is permanent. The learning process of sport skill must be adapted to the learning theories which have been proven to be useful.

References


Sapta Kunta Purnam., Kepelatihan Bulutangkis Modern, Surakarta: Yuma Pustaka: 2010


———, Psikologi Olahraga, Jakarta: PT. BPK Gunung Mulia