



Part of **SPRINGER NATURE**

PROCEEDINGS | JOURNALS | BOOKS

Search



Series: **Advances in Health Sciences Research**

Proceedings of the 2nd International Conference on Sports Sciences and Health 2018 (2nd ICSSH 2018)

HOME



The Faculty of Sport Sciences of Universitas Negeri Malang has been established since 2008. Having four bachelor courses of physical education, sport science, sport coaching education and public health and one master program in physical education, we continuously commit to build the academic atmosphere by organising the 2nd International Conference on Sport Sciences and Health (ICSSH) 2018 where sport and health academics and practitioners can share their ideas, perspectives and strategies to strengthen sport culture and healthy lifestyle. ICSSH being part of The Universitas Negeri Malang Annual Scientific Conferences provides academic platform for researchers to present their latest research and develop the roadmap for their future research. The Faculty of Sport Sciences would like to invite all of the researchers, practitioners, students and lecturers to join this 2nd ICSSH 2018.

Please click here for the conference website. (*Conference website no longer available.*)



Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com

- ▶ PROCEEDINGS
- ▶ JOURNALS
- ▶ BOOKS
- ▶ POLICIES
- ▶ MANAGE COOKIES/DO NOT SELL MY INFO
- ▶ ABOUT
- ▶ NEWS
- ▶ CONTACT
- ▶ SEARCH

[Home](#) [Privacy Policy](#) [Terms of use](#)



Copyright © 2006-2022 Atlantis Press – now part of Springer Nature



Part of **SPRINGER NATURE**

PROCEEDINGS | JOURNALS | BOOKS

Search



Series: [Advances in Health Sciences Research](#)

Proceedings of the 2nd International Conference on Sports Sciences and Health 2018 (2nd ICSSH 2018)

PREFACE

On behalf of the organizer and the committees, we are proud to welcome everyone in Malang, in the 2nd International Conference on Sport Sciences and Health (ICSSH) 2018 organized by The Faculty of Sport Sciences Universitas Negeri Malang.

The conference aimed to provide a forum for sport sciences and health academics and practitioners to share their ideas, perspectives and strategies to strengthen sport culture and healthy lifestyle. It also acts as an academic platform for researchers to present their latest research and develop the roadmap for their future research. Furthermore, the conference will extend the network between them to support more collaboration in health and sport sciences research and events.

The theme of 2nd International Conference on Sport Sciences and Health 2018 is 'Interprofessional Collaboration to Strengthen Physical Fitness and Characters of Young People through Sport Sciences and Health Innovation Program'. We look forward to hearing a variety of perspectives and ideas about the innovation to develop the physical fitness and to build characters of our young generation.

Your presence at the conference is helping to continue building the forum nurturing ideas, innovation and strengthen the collaboration among sport and health academics and practitioners.

The 2nd ICSSH 2018 is made possible by the dedication and hard work of the community. We are indebted to many. The conference would not be possible without the advice and support of our steering committees. We would like to express our gratitude to Professor Yoshinori Okade, Professor Dr. Low Wah Yun, Professor Chia Hua Kuo, and Professor John Wang Chee Keng, and Professor Adang Suherman for all their time and great energy to support us in the 2nd ICSSH 2018. We would also grateful for the support of the Rector of Universitas Negeri Malang, Professor AH. Rofi'uddin and the Dean of Faculty of Sport Sciences, Professor ME. Winarno, M.Pd. during the preparation of the conference.

Finally, we would like to thank all the presenters for the willingness to share their latest research and ideas and all the participations for their keen and active participation. Without your efforts, the 2nd ICSSH 2018 would not be possible. Keep up the good work. We hope that you will have and enjoyable and productive time in Malang, and leave with beautiful memories of our conference.

Dr. Imam Hariadi, M.Kes.
Chairman, the 2nd ICSSH 2018

Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com



- ▶ PROCEEDINGS
- ▶ JOURNALS
- ▶ BOOKS
- ▶ POLICIES
- ▶ MANAGE COOKIES/DO NOT SELL MY INFO
- ▶ ABOUT
- ▶ NEWS
- ▶ CONTACT
- ▶ SEARCH

[Home](#) [Privacy Policy](#) [Terms of use](#)   

Copyright © 2006-2022 Atlantis Press – now part of Springer Nature



Part of **SPRINGER NATURE**

[PROCEEDINGS](#) | JOURNALS | BOOKS

Search



Series: [Advances in Health Sciences Research](#)

Proceedings of the 2nd International Conference on Sports Sciences and Health 2018 (2nd ICSSH 2018)

ORGANIZERS

Chairperson and Editor in Chief

Dr. Imam Hariadi, M.Kes

Universitas Negeri Malang

Organizer Committee and Editorial Board

Dr. Ari Wibowo Kurniawan, M.Pd

Universitas Negeri Malang

dr. Desi Ariwinanti, M.PH

Universitas Negeri Malang

Keynote Speaker and Reviewer

Prof. Dr. M E Winarno, M.Pd

Universitas Negeri Malang

Prof. Low Wah Yun, PhD, AFBPsS, FBSCH, Cpsychol

University of Malaya

Prof. Chia Hua Kuo, Ph.D

University of Taipei

Prof. John Wang Chee Keng, BSc, Ph.D

National Institute of Education, Singapore

Prof. Yoshinori Okade, M.PE

Nippon Sports Science University

Reviewer

Prof. Dr. Adang Suherman, MA

Universitas Pendidikan Indonesia

Dr. Hariyoko, M.Pd

Universitas Negeri Malang

Dr. Asim, M.Pd

Universitas Negeri Malang

Dr. Siti Nurrochmah, M.Pd

Universitas Negeri Malang

Dr. dr. Moch Yunus, M.Kes

Universitas Negeri Malang

Editor



Dona Sandy Yudasmaras, S.Pd., M.Or

Universitas Negeri Malang

Nurrul Riyad Fadhli, S.Pd., M.Or

Universitas Negeri Malang

Taufik, S.Pd., M.Or

Universitas Negeri Malang

Dr. Prayogi Dwina Angga, S.Or., M.Pd

Universitas Negeri Malang

Ahmad Abdullah, M.Kes

Universitas Negeri Malang

Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com

▶ PROCEEDINGS

▶ JOURNALS

▶ BOOKS

▶ POLICIES

▶ ABOUT

▶ NEWS

▶ CONTACT

▶ SEARCH

▶ [MANAGE COOKIES/DO NOT SELL MY INFO](#)



[Home](#) [Privacy Policy](#) [Terms of use](#)   

Copyright © 2006-2022 Atlantis Press – now part of Springer Nature



Part of **SPRINGER NATURE**

PROCEEDINGS | JOURNALS | BOOKS

Search



Series: **Advances in Health Sciences Research**

Proceedings of the 2nd International Conference on Sports Sciences and Health 2018 (2nd ICSSH 2018)

AUTHORS

127 authors

Abdul Karim, Abdurrauf

Practical Self Defense Training Model Based On Submission Technique in Pencak Silat

Abidin, Dindin

Effect of Push Up and Pull Up on Jump Shoot Results in Hand Ball Games

Adi, Sapto

The Formation of Student Character through the Active Role of Physical Education Teachers as a Role Model

Alpen, Joni

The Effect Of Learning Strategies And Confidence Toward Learning Outcomes Basketball Chest Pass

Amiq, Fahrial

Model of Defending Tactics For Students Aged 14-16 Years Old

Andi Muhammad Aswan, Andi

Effect of Standing Jumps and Box Drills to Explosive Power in Momtong Dollyo Chagi

Anshari, D.

How Indonesian Media Frame the Harms and Benefits of E-cigarette

Ariwinanti, Desi

The Knowledge of HIV Prevention and Sexual Reproductive Health among Papua Adolescent in a Health Promotion Counselling Using Friendly Module and Games

Astri Ayu Irawan, Astri

Effect of Standing Jumps and Box Drills to Explosive Power in Momtong Dollyo Chagi

Astutik, Erni

Exclusive Breastfeeding Survival And Factors Related to Early Breastfeeding Cessation in Indonesia

Bagus Januarto, Oni

Video Based Learning for Basketball Referee

Bahri, Syaiful

Model of Defending Tactics For Students Aged 14-16 Years Old

Basuki, Mr.

Motion Activity through Games toward Students' Creative Thinking Skill

Budiarti, Ratna

The Effectiveness Test of Artistic Gymnastic Talent Scouting Selection Model – Based Application

Bujang, Mr.

Effect of Leg Power, Arm Power, Eyes and Foot Coordination and Self Confidence on Back Attack Smash in Volleyball

Bujang, Mr.

Development of Non Locomotor Motion Models For Children 7 Years Old

Chidambaram, Veeramani

Step Dynamics Analysis in 100 m Sprint Biomechanics Study in Elite And Junior Sprinters

D.D, Utama

Students Motivation In Joining Basketball Class

Damayanti, R.

How Indonesian Media Frame the Harms and Benefits of E-cigarette

Darmawan, Arief

Development of Non Locomotor Motion Models For Children 7 Years Old

**Desy Tya Maya, Ningrum**

Effect of Leg Power, Arm Power, Eyes and Foot Coordination and Self Confidence on Back Attack Smash in Volleyball

Devi, Mazarina

The Effectiveness Of Health Promotion Through Song Towards Mother's Knowledge On Balanced Nutrition In Kindergarten Student

Dwi Oktaviana, Yolanda

The Effect of Dumbbell Swing Exercise Method to the Arms Muscle Strength of Petanque Athletes

Dwi Tama, Tika

Exclusive Breastfeeding Survival And Factors Related to Early Breastfeeding Cessation in Indonesia

Dwina Angga, Prayogi

Anthropometric and Motor Performance of Junior Badminton Athlete

E, Sudarmanto

Anxiety and Performance of Scuba Diver

Evi Susianti, Evi

Effect of Standing Jumps and Box Drills to Explosive Power in Momtong Dollyo Chagi

Faiz Ridlo, Azi

The Effect of Dumbbell Swing Exercise Method to the Arms Muscle Strength of Petanque Athletes

Gesang Kinanthi, Rias

The Effect of Aerobic Exercise on Increasing Physical Fitness of Baitul Jannah Islamic Boarding School Male Malang Students

Ghunaifi Dardiri, Aang

A Study of the Needs of Brain-Based Learning in Physical Education in the Senior High School

Ginanjjar Hidayatullah, Gilang

Influence Of Outdoor Education on Student Self-Control

Hadiono, Mr.

High Intensity Interval Training (HIIT) and Moderate Intensity Training (MIT) Affects TNF- α and IL-6 levels In Rats

Hapsari, Anindya

The Estimation of Male Contraceptive Methods' Development Considering Legal, Ethical, and Religious Aspects

Haqiyah, Aridhotul

Contribution of Physical Condition and Self Efficacy Towards the Gyaku Zuki Chudan

Hariadi, Imam

Relationship Between Body Mass Index (BMI) With Agility of Elementary School Children

Hariyanto, Eko

A Study of the Needs of Brain-Based Learning in Physical Education in the Senior High School

Herya Ulfah, Nurnaningsih

The Knowledge of HIV Prevention and Sexual Reproductive Health among Papua Adolescent in a Health Promotion Counselling Using Friendly Module and Games

Humaid, Hidayat

The Role of Parent for Their Children's Confidence in Soccer Activity U-11 Players

Ifwandi, Mr.

The Evaluation of the Physical Fitness Test for Female Junior High School Students

Indera Pamungkas, Okky

The Eight-Weeks Physical Exercise Program In Maintaining Power On Taekwondo Athletes In The Competition Period

Intan Cahyani, Firunika

The Role of Motivation in Increasing Achievement: Perspective Sports Psychology

Isknadar, Tatang

The Effect of Dumbbell Swing Exercise Method to the Arms Muscle Strength of Petanque Athletes

Ismayanti, Rahma

The Effectiveness Of Health Promotion Through Song Towards Mother's Knowledge On Balanced Nutrition In Kindergarten Student

Jermaina, Nina

The Personality Influence on GPA: A Case Study of Sports Psychology

Katerine Aftabuddin, Sepfrita

The Estimation of Male Contraceptive Methods' Development Considering Legal, Ethical, and Religious Aspects

Katmawanti, Septa

The Effectiveness Of Health Promotion Through Song Towards Mother's Knowledge On Balanced Nutrition In Kindergarten Student

Komarudin, Mr.

Life Kinetic Training In Improving The Cognitive Functions

Kurniawan, Agung

Effect of Light Intensity On Eye Fatigue

Kurniawati, Restu

Effect of Light Intensity On Eye Fatigue

Kusumawati, Mia

Effect of Push Up and Pull Up on Jump Shoot Results in Hand Ball Games

Lasma, Yunita

Effects of Rhythmic Gymnastics Exercise Based on Chair Media to Physical Fitness of Students

Leni, Apriani

The Effect Of Learning Strategies And Confidence Toward Learning Outcomes Basketball Chest Pass

Lucky, Radita Alma

The Knowledge of HIV Prevention and Sexual Reproductive Health among Papua Adolescent in a Health Promotion Counselling Using Friendly Module and Games

Lumintuarso, Ria

Multilateral Training Model in Sport Performance

Lumintuarso, Ria

Step Dynamics Analysis in 100 m Sprint Biomechanics Study in Elite And Junior Sprinters

M, Yulianti

Students Motivation In Joining Basketball Class

M H, Rendi

The Effect of Aerobic Exercise on Increasing Physical Fitness of Baitul Jannah Islamic Boarding School Male Malang Students

M.Y.N, Fahmi

The Effect of Learning Dribble Variation Using Modification of Plastic Balls on Improving The Results of Football Dribble Skills Learning

Mardji, Mr.

Effect of Light Intensity On Eye Fatigue

Marhaeni, Eddy

The Personality Influence on GPA: A Case Study of Sports Psychology

Marheni, Eddy

The Role of Motivation in Increasing Achievement: Perspective Sports Psychology

Marlina, Yeni

The Evaluation of the Physical Fitness Test for Female Junior High School Students

Maycock, B.J

How Indonesian Media Frame the Harms and Benefits of E-cigarette

Merawati, Desiana

The Effect of Aerobic Exercise on Increasing Physical Fitness of Baitul Jannah Islamic Boarding School Male Malang Students

Mu'arifin, Mr.

Problem Identification of Professional Development of Physical Education Teachers in Elementary School

Muhamad, Memet

Contribution of Physical Condition and Self Efficacy Towards the Gyaku Zuki Chudan

Mu'arif, Samsul

Adaptation to the levels of MDA and SOD Enzyme Activity of MICT and HIIT Exer
On Wistar

Mylsidayu, Apta

The Influence of Cardio Workout to Aerobic Endurance

Nurhasan, Mr.

Motion Activity through Games toward Students' Creative Thinking Skill

Nurrochmah, Siti

The Effect of Learning Dribble Variation Using Modification of Plastic Balls on
Improving The Results of Football Dribble Skills Learning

Nurrul, Riyad Fadhli

Identification of High School Physical Education Teacher Assessment Model

Nuzuli, Mr.

Physical Fitness Test for Senior High School

Parningotan Purba, Joen

The Influence of Playing Approach (Permainan Bebenangan Dan Hitam Hijau) to the
Students Learning Outcomes in Sprinting Ability

Paulina Heynoek, Febrita

The Knowledge of HIV Prevention and Sexual Reproductive Health among Papua
Adolescent in a Health Promotion Counselling Using Friendly Module and Games

Pradityana, Karisdha

Practical Self Defense Training Model Based On Submission Technique in Pencak Silat

Prasetyo Utomo, Erwan

Analysis of Biomechanics Slap Hit and Push in The Field Hockey

Pratama, Raditya

Video Based Learning for Basketball Referee

Primasoni, Nawan

The Effectiveness Test of Artistic Gymnastic Talent Scouting Selection Model – Based
Application

Purnomo, Eko

The Role of Motivation in Increasing Achievement: Perspective Sports Psycholog

Purnomo, Eko

The Personality Influence on GPA: A Case Study of Sports Psychology

Putra, Sukardi

Physical Fitness Test for Senior High School

Putri Pamungkas, Yualita

Correlation Between Social Support And Strees Level on The Elderly Patients of Diabetes Melitus Type 2

Rachman, Fadlu

Effects of Rhythmic Gymnastics Exercise Based on Chair Media to Physical Fitness of Students

Rahayuni, Kurniati

Psychological Demands and Cultural Sport Psychology in Indonesian Context

Rahmawati Kurnia, Ranni

The Influence of Playing Approach (Permainan Bebenangan Dan Hitam Hijau) to the Students Learning Outcomes in Sprinting Ability

Ratih, S.P

How Indonesian Media Frame the Harms and Benefits of E-cigarette

Rini Sukamti, Endang

The Effectiveness Test of Artistic Gymnastic Talent Scouting Selection Model – Based Application

Riyad Fadhli, Nurrul

Relationship Between Body Mass Index (BMI) With Agility of Elementary School Children

Riyad Fadhli, Nurrul

The Use of Blended Learning Model Integrated with Learning Management System in Beach Volleyball Learning Subject in Faculty of Sports Science State University of Malang

Roesdivanto. Mr.

-----, -----, -----
The Use of Blended Learning Model Integrated with Learning Management System
Beach Volleyball Learning Subject in Faculty of Sports Science State University of
Malang

Rohendi Rohidi, Tjetjep

The Eight-Weeks Physical Exercise Program In Maintaining Power On Taekwondo
Athletes In The Competition Period

Ruslan, Mr.

Analysis Of Energy Expenditure, Energy Consumption, And Training Load Of
Sepaktakraw Athletes

Rusli, Mr.

Analysis Of Energy Expenditure, Energy Consumption, And Training Load Of
Sepaktakraw Athletes

S.S, Rumpoko

Anxiety and Performance of Scuba Diver

Sandy Yudasmara, Dona

Relationship Between Body Mass Index (BMI) With Agility of Elementary School
Children

Sandy Yudasmara, Dona

Identification of High School Physical Education Teacher Assessment Model

Setijono, Hari

Conventional and Modern Learning with Different Motor Abilities Towards Increasing
Consistency of Groundstroke Forehand Drive in Tennis

Siahaan, Jonni

The Competency Of Physical Education And Sport Teachers In Papua Province
Indonesia

Simanjuntak, Victor

Learning Result of Mawashi Geri Karate

Sri Wahjuni, Endang

The Effects of Continuous and Interval Training Toward VO₂max Increase for Male

1

2

>



Atlantis Press

Atlantis Press – now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books. We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

For more information, please contact us at: contact@atlantis-press.com

- ▶ PROCEEDINGS
- ▶ JOURNALS
- ▶ BOOKS
- ▶ POLICIES
- ▶ MANAGE COOKIES/DO NOT SELL MY INFO
- ▶ ABOUT
- ▶ NEWS
- ▶ CONTACT
- ▶ SEARCH

[Home](#) [Privacy Policy](#) [Terms of use](#)



Copyright © 2006-2022 Atlantis Press – now part of Springer Nature



Part of **SPRINGER NATURE**

[PROCEEDINGS](#) | [JOURNALS](#) | [BOOKS](#)

Search



Series: [Advances in Health Sciences Research](#)

Proceedings of the 2nd International Conference on Sports Sciences and Health 2018 (2nd ICSSH 2018)

ARTICLES

Search

[+ Advanced search](#)

SEARCH

54 articles

Proceedings Article

[Computer Based Exercise Program Design](#)

Mrs. Sulistyorini, Roesdiyanto Sulistyorini

The complete figure of sports coach' competene consists of academic and professional ability as a whole. The academic competence is defined as the scientific basis of the training implementation tips which is the foundation for the development of professional competence. The outcome of this study is...

[+ Article details](#)

[+ Download article \(PDF\)](#)



Proceedings Article

Conventional and Modern Learning with Different Motor Abilities Towards Increasing Consistency of Groundstroke Forehand Drive in Tennis

Lokananta Teguh Hari W, Nining Widyah Kusnanik, Hari Setijono

This research was aimed to determine the different effects of learning approach using conventional and modern way with low and high motor ability towards the increasing consistency of groundstroke drive forehand in tennis. Research population are freshman in the Department of Sport Coaching Education,...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Video Based Learning for Basketball Referee

Raditya Pratama, Oni Bagus Januarto

The material of mechanic court is a material that must be mastered by a basketball umpire. The research and development of this Basketball scoresheet refers to the Research & Development (R & D) development model of Borg & Gall Outcomes but uses only seven steps. The result of this research and development...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Analysis of Biomechanics Slap Hit and Push in The Field

Hockey

Erwan Prasetyo Utomo, Nining Widyah Kusnanik, Fuad Y

In the study will describe about the variables that provide support in the implementation of the slap hit and push to be used as a curriculum in the basic techniques of coaching at an early age in schools and clubs. Data retrieval is done by using two Sony Handycam HDX 450 on six athletes PELATNAS as...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

A Study of the Needs of Brain-Based Learning in Physical Education in the Senior High School

Aang Ghunaifi Dardiri, Eko Hariyanto

This study aimed to obtain data and informasi on the needs of brain-based learning in physical education in senior high school. Research method used was a questionnaire filled by class XI high school students. Data analysis was a quantitative descriptive in the form of percentages. The results of the...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Estimation of Male Contraceptive Methods' Development Considering Legal, Ethical, and Religious Aspects

Anindya Hapsari, Sepfrita Katerine Aftabuddin

Contraceptives are tools that are used to prevent conception. The aim of these tools is to control population growth by controlling the rate of birth. There are

many contraceptive methods, but male participation rate are still low. Un
today, male contraceptive methods are still limited. And these...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Influence of Cardio Workout to Aerobic Endurance

Apta Mylsidayu

This study aims to explore how changes cardio workout to aerobic endurance. The research method used is experimental method. Participants were 6 undergraduate students who have time to training and are able to follow the training from beginning to end. The aerobic endurance test instrument were the harvard...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Multimedia-Based Learning Model for Gymnastics Skills

Ari Wibowo Kurniawan

This study aims to develop a multimedia-based learning model of basic skill of gymnastic exercise to students majoring Physical and Health Education in State University of Malang. The products of this research and development are multimedia-based learning model of basic skill of gymnastic exercise. This...

[+ Article details](#)

[+ Download article \(PDF\)](#)



Proceedings Article

Motion Activity through Games toward Students' Creative Thinking Skill

Mr. Basuki, Mr. Nurhasan, Mr. Suroto

This study aims to determine the effect of motion activity through games on students' creative thinking skills. Conceptually, the goals of the Sports and Health Physical Education subjects (PJOK) is not only to develop physical abilities, but also to develop intellectual, mental, social and emotional...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Effect of Leg Power, Arm Power, Eyes and Foot Coordination and Self Confidence on Back Attack Smash in Volleyball

Mr. Bujang, Ningrum Desy Tya Maya, Mahyudi Yafi Velyan

This study aims to determine the effect of limb power, arm power, eye-hand-foot coordination and self-confidence against smash back attack in volleyball. The research using path analysis. Population and sample of this research is athletes PELATCAB PORDA Bekasi. The results of this study explain that...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Knowledge of HIV Prevention and Sexual Reproductive Health among Papua Adolescent in a Health Promotion Counselling Using Friendly Module and Games

Desi Ariwinanti, Nurnaningsih Herya Ulfah, Febrita Paulina Heynoek, Ra
Alma Lucky

To engage the adolescents in Sexual and Reproductive Health (SRH) promotion counselling there is the need to innovate using new media that is more appropriate to their needs and acceptable to their daily life. A crossed-sectional questionnaire survey was conducted among 66 randomly selected high school...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Effect of Aerobic Exercise on Increasing Physical Fitness of Baitul Jannah Islamic Boarding School Male Malang Students

Rendi M H, Desiana Merawati, Rias Gesang Kinanthi

The aim of this study was to determine the effect of exercising up and down stairs on physical fitness of Baitul Jannah Islamic Boarding School students by measuring cardiovascular endurance using the Rockport test. This study uses a pre-experimental research method with pretest-posttest technique, by...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Eight-Weeks Physical Exercise Program In Maintaining Power On Taekwondo Athletes In The Competition Period

Devi Tirtawirya, Tjetjep Rohendi Rohidi, Okky Indera Pamungkas

The aimed of this research is to observe and discover the influence of the

speed and power Taekwondo training program in maintaining physical performance ahead of the main competition. This research applies two research methods, the qualitative and quantitative. The subjects of the research are 7 athletes...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Role of Motivation in Increasing Achievement: Perspective Sports Psychology

Eddy Marheni, Eko Purnomo, Firunika Intan Cahyani

The purpose of this research is to know and understand achievement motivation at junior athletic athletes of Padang. This study was conducted on 15 athletics athletes junior Padang aged 10-15 years. The method used in this research is qualitative method with descriptive approach. Methods of data collection...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Personality Influence on GPA: A Case Study of Sports Psychology

Eko Purnomo, Nina Jermaina, Eddy Marhaeni

Personality is the whole way an individual reacts and interacts with other individuals, in other words personality is described in terms of measurable properties indicated by a person. The purpose of this research is to see if there is influence of student personality with GPA. This study was conducted...

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

The Effectiveness Test of Artistic Gymnastic Talent Scouting Selection Model – Based Application

Endang Rini Sukamti, Nawan Primasoni, Ratna Budiarti

The development of gymnastics athletes achievement in Indonesia did not show significant progress. Talent scouting is the important basic in achieving optimal achievement. The aim of this study to find children aged 7-9 years who are talented in gymnastics through artistic gymnastic talent scouting application...

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

Development of Non Locomotor Motion Models For Children 7 Years Old

Mr. Bujang, Arief Darmawan

This study aims to develop non locomotor motion model for children 7 years old. This non-locomotor motion model is adapted to the characteristics and growth of the child. Research method used is research and development of Borg & Gall by using 7 stages namely: (1) Research and information collecting (2)...

[+ Article details](#)[+ Download article \(PDF\)](#)



Proceedings Article

The Formation of Student Character through the Active Role of Physical Education Teachers as a Role Model

Sapto Adi

The central role of physical and sports education teachers as the main actor of interaction in learning, providing flexibility in displaying a positive role for students, in which will affect both the character and behavior of the students. The projection of this role can be done when the teacher conducts...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Analysis Of Energy Expenditure, Energy Consumption, And Training Load Of Sepaktakraw Athletes

Mr. Rusli, Mr. Syahrudin, Mr. Ruslan

This study aims to assess the load exercise of sepaktakraw athletes based on the heart rate of athletes. This survey research uses a quantitative approach. The subjects were 20 sepaktakraw athletes. The initial stage was to take athlete heartbeat data before and after exercise. The next process were...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Influence Of Outdoor Education on Student Self-Control

Gilang Ginanjar Hidayatullah, Nina Sutresna

The purpose of this study is to find out the influence of the outdoor education

towards self control students. Outdoor pedagogy that utilizes challenging activities in an outdoor environment (usually meaning an environment r enclosed by man made structures) for the personal, social, and educational...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

High Intensity Interval Training (HIIT) and Moderate Intensity Training (MIT) Against TNF- α and IL-6 levels In Rats

Mr. Hadiono, B.M. Wara Kushartanti

The aim of this study was to investigate the effect of exercise with High Intensity Interval Training (HIIT) and Moderate Intensity Training (MIT) on inflammatory profile of proinflammatory cytokines TNF- α and IL-6 on the subject of obesity. This research is used 39 wistar rats of male-sex obesity. Intervention...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Psychological Demands and Cultural Sport Psychology in Indonesian Context

Kurniati Rahayuni

Psychological demands are social pressure projected to athletes which evoke emotional, cognitive and behavioral changes. Through utilizing cultural sport psychology (CSP) paradigm, this literature review discussed several concepts in sport psychology which potentially prominent as psychological demands...

[+ Article details](#)

[+ Download article \(PDF\)](#)



Proceedings Article

Relationship Between Body Mass Index (BMI) With Agility of Elementary School Children

Imam Hariadi, Nurrul Riyad Fadhli, Dona Sandy Yudasmaras

The purpose of this study was to determine the relationship between BMI of male and female students with agility level. This study uses a cross-sectional method; the subject of the study is students of elementary school level second to sixth grade. The conclusion of this study is that there is no significant...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Competency Of Physical Education And Sport Teachers In Papua Province Indonesia

Jonni Siahaan

This research purpose to observed the competency of physical education and sport teachers at Town Jayapura, Regent Jayapura and Regent Keerom in Papua Province with survey. The competency of physical education and sport teachers as a variabel independent through survey with posttest design only. There...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Life Kinetic Training In Improving The Cognitive Function

Mr. Komarudin

In Indonesia, Life Kinetic training in improving the cognitive function of football athletes is rarely limited. Therefore, football athletes are often not focused on doing their duties. Exercises in developing countries are more varied in leading to multi-tasking exercises through Life Kinetic training,...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Effect Of Learning Strategies And Confidence Toward Learning Outcomes Basketball Chest Pass

Apriani Leni, Joni Alpen

The purpose of this study was to determine the difference between learning strategies Enquiry and Strategy Problem Based Learning (SPBM) as well self confidence of Chest pass on learning outcomes basketball. This research was conducted in class X (Ten) SMAN 14 Pekanbaru. This study used a treatment by...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Identification of High School Physical Education Teacher Assessment Model

M.E Winarno, Dona Sandy Yudasmaras, Mr. Taufik, Riyad Fadhli Nurrul

The purpose of this study was to determine the forms of learning assessments used by High School Physical Education Teachers in Malang City. The

research method used is descriptive with an evaluation approach to learn activities. The results showed that the Physical Education (PE) learning assessment...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Contribution of Physical Condition and Self Efficacy Towards the Gyaku Zuki Chudan

Memet Muhamad, Aridhotul Haqiyah

This study aims to determine the effect of power arm, flexibility and self efficacy towards the gyaku zuki chudan on the national athletes karate the of Indonesia. The research method is a descriptive associative, and the analysis technique is path analysis. The sampling technique used is total sampling...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Effect of Push Up and Pull Up on Jump Shoot Results in Hand Ball Games

Mia Kusumawati, Dindin Abidin

The purpose of this study is to find out how much Push Up and Pull Up Exercise Effect on Flying Shoot Results in Handball Ball Games Student Handball Community Unisma Bekasi. This research was conducted in Unipreneur Unisma Bekasi field from September 11, 2017 to October 11, 2017, the method used in...

[+ Article details](#)

[+ Download article \(PDF\)](#)



Proceedings Article

The Effect of Learning Dribble Variation Using Modification of Plastic Balls on Improving The Results of Football Dribble Skills Learning

Fahmi M.Y.N, Siti Nurrochmah

This study aims to determine the effect of learning variations of straight and zig-zag dribble on increasing the results of learning football dribble skills. The result of analysis of one way anova $F_{count} = 5,324 > F_{Table} \alpha = 0,05 = 4,149$ and the significance difference (LSD) test obtained by $vs = 1,0159...$

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Effects of Continuous and Interval Training Toward $\dot{V}O_2\max$ Increase for Male

Moch Yunus, Endang Sri Wahjuni, Mr. Supriatna

The research aimed at investigating the difference of continuous and interval training toward maximum $\dot{V}O_2$ increase. The research used randomized group pretest and posttest design. Population of the research were students of Sport Training Education Faculty of Sport Sciences Malang State . Sampling technique...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Problem Identification of Professional Development of Physical Education Teachers in Elementary School

Mr. Mu'arifin

This study aims to identify problems confronted by Physical Education Teachers (PE) of elementary schools (SD) in their professional development. The collected data is utilized as a requisite in determining alternative problem-solving coaching. The survey method is used to identify seven existing problems....

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Anthropometric and Motor Performance of Junior Badminton Athlete

Prayogi Dwina Angga

This study aims to describe the anthropometric and motor performance profile of junior male badminton athletes in South Kalimantan. The model of this research is descriptive quantitative. The used method is survey with data retrieval technique using test and measurement. This research was conducted on...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Effect of Light Intensity On Eye Fatigue

Restu Kurniawati, Mr. Mardji, Agung Kurniawan

The improper light intensity can cause eye fatigue in a person. Based on

preliminary observation in the Technical Implementation Unit of Job Training (UPTPK) Singosari-Malang, it was known that the light intensit the welding room at UPTPK Singosari-Malang was ranging from 101,25 lux to 102,97 lux....

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Multilateral Training Model in Sport Performance

Ria Lumintuarso

This research aims to produce the training method in sport performance base on multilateral development and its effect in performance. This study uses a research and development approach. The samples consist of 16 primary schools extracurricular in Yogyakarta Province, by purposive sampling technique....

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Use of Blended Learning Model Integrated with Learning Management System in Beach Volleyball Learning Subject in Faculty of Sports Science State University of Malang

Mr. Roesdiyanto, Mrs Sulistyorini, Nurrul Riyad Fadhli, Mr. Taufik

The purpose of this research was to develop beach volleyball learning product using blended learning model integrated with E-learning of State University of Malang (UM). The research method used was the research and development method (R&D), with the following steps (a) needs analysis, (b) initial product...

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

Adaptation to the levels of MDA and SOD Enzyme Activity of MICT and HIIT Exercise On Wistar

Samsul Mu'arif, Mr. Widiyanto

The purpose of this study is to reveal the influence of moderate intensity continuous training (MICT) and high-intensity interval training (HIIT) against the levels of malondialdehyde (MDA) and superoxide dismutase enzyme activity (SOD) in blood circulation. The sample in this study used 21 male Wistar...

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

The Effectiveness Of Health Promotion Through Song Towards Mother's Knowledge On Balanced Nutrition In Kindergarten Student

Rahma Ismayanti, Mazarina Devi, Septa Katmawanti

Malnutrition still a major public health problem in Indonesia. Lack of nutrition can not be resolved, the prevalence of malnutrition continues to rise. Efforts to optimize the delivery of Pesan Umum Gizi Seimbang need to be done to the community, through health education and promotion, as well as information,...

[+ Article details](#)[+ Download article \(PDF\)](#)



Proceedings Article

How Indonesian Media Frame the Harms and Benefits of E-cigarette

S.P Ratih, B.J Maycock, R. Damayanti, D. Anshari

Electronic cigarettes (e-cigarette), of which the health effects are still unknown, have been sold in Indonesian market since 2010. We sought to examine the portrayals of harms and benefits of e-cigarette in online news media as they have been the new main source of information among Indonesians. This...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Evaluation of the Physical Fitness Test for Female Junior High School Students

Mr. Syamsulrizal, Yeni Marlina, Mr. Ifwandi

The human will be energetic in doing daily life activities as the impact practicing sport consistently and consequently. Practicing sport instills moral values, noble character, sportivity, discipline, avoid discrimination such religion discrimination, tribe, difference social status, and other form...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Effect of Dumbbell Swing Exercise Method to the Arms Muscle Strength of Petanque Athletes

Tatang Iskandar, Azi Faiz Ridlo, Yolanda Dwi Oktaviana



The study aims at finding out the effect of dumbbell swing to the arms muscle strength of Petanque sports training athletes in Bekasi. The method of the study was experimental method. The population of the study was 15 sports training athletes in Bekasi, in which 8 athletes of sports training was chosen...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Exclusive Breastfeeding Survival And Factors Related to Early Breastfeeding Cessation in Indonesia

Tika Dwi Tama, Erni Astutik

Give only breast milk for the first six months is recommended for optimizing the infant's growth and development. In fact, the rate of exclusive breastfeeding in Indonesia is relatively low. This study was aimed to assess the survival probability of exclusive breastfeeding and identify the factors related...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Step Dynamics Analysis in 100 m Sprint Biomechanics Study in Elite And Junior Sprinters

Veeramani Chidambaram, Ria Lumintuarso

This study aimed to determine the frequency of the step of 100 meters sprint, the research method used is to analyze the video with dartfish. The results of this study indicate that the anthropometry profile greatly determines the

sprint running speed of 100 meters.



[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Learning Result of Mawashi Geri Karate

Victor Simanjuntak

The purpose of this study was to know the effect of learning approach and motor educability toward the learning result of Mawashi-geri karate in Physical Education Program, Teacher Training and Education Faculty, Tanjungpura University. The research method applied in this study was experimental design....

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Practical Self Defense Training Model Based On Submission Technique in Pencak Silat

Mrs Widiastuti, Abdurrauf Abdul Karim, Karisdha Pradityana

The purpose of research and development model exercise fighter practical martial arts in an athlete PPS Satria Muda indonesia. Research and development it uses the methodology the development of research and development (D & D) of Borg and Gall. Analysis of data the research uses the standard significant...

[+ Article details](#)

[+ Download article \(PDF\)](#)



Proceedings Article

Effects of Rhythmic Gymnastics Exercise Based on Chair Media to Physical Fitness of Students

Yunita Lasma, Fadlu Rachman

This aim of this research is to know of the effect of rhythmic gymnastics exercises based on chair media to physical fitness on senior high school students. The test instrument of this research is the Indonesian Physical Fitness Test (TKJI). The sample of this research amounted to 40 people who are students...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Physical Fitness Test for Senior High School

Mr. Zulfikar, Mr. Nuzuli, Sukardi Putra

This research aims to evaluate the degree of physical fitness of high school students in the area of Aceh Besar regency 2018 using the instruments of the TKJAB specifically developed for the area of Aceh Besar regency. The results of the analysis of data obtained summary as follows: average physical...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Anxiety and Performance of Scuba Diver

Rumpoko S.S, Sitiasih V.S, Sudarmanto E

A diver suffering from anxiety symptoms will definitely have an impact.

Physical and psychological factors that will give negative effects on performance, and advanced exposure can cause loss of control of the bod cardiorespiratory system increases and cause panic. Anxiety is a psychological symptoms...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Role of Parent for Their Children's Confidence in Soccer Activity U-11 Players

Hidayat Humaid, Ferry Yohannes Wattimena

The purpose of the study was to find information about how much the role of parent for their children's confidence who train in Ragunan soccer school. There has been much literature and anecdotal accounts reporting poor parental behaviours in the youth sporting context. Pre-existing studies on parental...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

The Influence of Playing Approach (Permainan Bebentengan Dan Hitam Hijau) to the Students Learning Outcomes in Sprinting Ability

Sri Sundari, Ranni Rahmawati Kurnia, Joen Parningotan Purba

The learning of playing approach is a model of phsycal learning activity as one of the appropriate method in which the active involemen of students in learning while playing. The purpose of this study is to determine how the influence of playing learning approach on student result in sprint learning....

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

Correlation Between Social Support And Strees Level on The Elderly Patients of Diabetes Melitus Type 2

Yualita Putri Pamungkas, Rara Warih Gayatri

This study aims to know the correlation between social suppot and stress level in patients with type 2 diabetes mellitus in the Janti's Public Health Center. This research uses the method correlational quantitative approach, with cross sectional design, and sample in this study were patients with type...

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

Model of Defending Tactics For Students Aged 14-16 Years Old

Syaiful Bahri, Fahrial Amiq

This study aims to develop exercise model of defending technique for football that is packaged in the form of video. This study Research and Development design from Borg and Gall which was modified by the researchers. The research procedures were: (1) Conducting research and data collection, (2) Developing...

[+ Article details](#)[+ Download article \(PDF\)](#)

Proceedings Article

Students Motivation In Joining Basketball Class

Yulianti M, Utama D.D

Based on the observations that researchers do on students of class VIII SMP Negeri 1 Salo when they practice basketball. The problem is that not all students are eager to follow the lesson and also not all students master the basic technique of basketball. The purpose of this study is to determine the...

[+ Article details](#)

[+ Download article \(PDF\)](#)

Proceedings Article

Effect of Standing Jumps and Box Drills to Explosive Power in Momtong Dollyo Chagi

Evi Evi Susianti, Astri Astri Ayu Irawan, Andi Andi Muhammad Aswan

This study is used to find out: 1) the difference in explosive power of kick momtong dollyo chagi between plyometrics standing jumps and box drills on taekwondo in at Senior High School 1 Leuwiliang, Bogor, 2) The difference in explosive power of kick momtong dollyo chagi between plyometrics standing

Atlantis Press

[+ Article details](#) Atlantis Press is now part of Springer Nature – is a professional publisher of scientific, technical & medical (STM) proceedings, journals and books.

[+ Download article \(PDF\)](#)

We offer world-class services, fast turnaround times and personalised communication. The proceedings and journals on our platform are Open Access and generate millions of downloads every month.

1

For more information, please contact us at: contact@atlantispress.com

▶ PROCEEDINGS

▶ ABOUT

▶ JOURNALS

▶ NEWS

- ▶ BOOKS
- ▶ POLICIES
- ▶ MANAGE COOKIES/DO NOT SELL MY INFO
- ▶ CONTACT
- ▶ SEARCH



[Home](#) [Privacy Policy](#) [Terms of use](#)



Copyright © 2006-2022 Atlantis Press – now part of Springer Nature

Motion Activity through Games toward Students Creative Thinking Skills

Mr. Basuki

Post Graduated Program of Sports
Science
Universitas Negeri Surabaya
Surabaya, Indonesia
basukibasuki@mhs.unesa.ac.id.

Mr. Nurhasan

Post Graduated Program of Sports
Science
Universitas Negeri Surabaya
Surabaya, Indonesia
nurhasan@unesa.ac.id.

Mr. Suroto

Post Graduated Program of Sports
Science
Universitas Negeri Surabaya
Surabaya, Indonesia
suroto@unesa.ac.id.

Abstract— This study aims to determine the effect of motion activity through games on students' creative thinking skills. Conceptually, the goals of the Sports and Health Physical Education subjects (PJOK) is not only to develop physical abilities, but also to develop intellectual, mental, social and emotional dimensions. This study was quasi-experimental research by using posttest-only control group design. The population of the study was all eighth grade students in State Junior High School (SMPN) 1 Diwek and State Junior High School (SMPN) 5 Jombang. Random sampling technique was used in this study. The sample of the study were 68. Data collection of this study used students' thinking tests. Data in this study were analyzed by using SPSS 20 in consideration of significance level of 0.05. The results of data analysis showed that the probability value of the learning strategy is higher than 0.05, it was 0,000. Thus the null hypothesis was rejected and the research hypothesis was accepted

Keywords: motion activity, game, creative thinking skills

I. INTRODUCTION

Conceptually, the goals of the Sports and Health Physical Education subjects (PJOK) is not only to develop physical abilities, but also to develop intellectual, mental, social and emotional dimensions. Rink, & Hall [6], states that through PJOK it brings an impact of meaningful learning experience if the learning process include; (1) the learning experience potentially improving the student's ability to move; (2) the learning experience provides maximum activity or time to practice for all students appropriately to the student's ability level; (3) learning experience is appropriate to the experience level of the students; and (4) the learning experience is potential to integrate educational goals (skills, attitudes, and knowledge). Lynch & Soukup [4] state that PJOK is a key area of learning in a curriculum that focuses explicitly on developing movement skills and knowledge, understanding, skills through physical activities with competence and confidence to encourage the sustainability of students' life and in turn bring health as the goal.

Students have a variety learning methods in accordance with the development and history of learning settings. So that appropriate learning methods are needed in order to make learning objectives be achieved. Silverman [8] states that to master higher movements or skills, students need time and different practice, and it is determined by a teacher in designing the appropriate learning process. Moreover, Silverman & Mercier [9] PJOK teachers play an important role in designing instructional for physical and motoric skills development of students.

PJOK should pay attention on the students' changing and conditions in accordance with "Developmentally Appropriate Practice" (DAP). It means that the task of teacher in delivering the material must pay attention of changing in several things, namely: 1) child development and learning - knowledge of age-related human characteristics that allow general predictions with age ranges about what activities, materials, interactions, or experiences that will be safe, healthy, interesting, achievable, and also challenging for children; 2) the strengths, interests, and needs of each child in the group to be able to adapt and respond to the inevitable individual variations; and 3) the social and cultural context in which children live to ensure that the learning experience is meaningful, relevant, and respects children who participate and also their families [1].

Creative teacher is needed in order to overcome the students' low achievement of the subject. The unavailability of facilities and infrastructure requires teachers to think creatively. In addition, variations in achievement in order to make students active during the learning process. The existence of teachers who are able to optimize the facilities and can make students to learn without being forced, especially when movement activities are needed to achieve the learning objectives. Teachers are needed to be able to modify everything so that the learning process goes well. Modification methods can be taken by reducing or increasing the level of difficulty faced by students both in terms of assistive devices and equipment, material characteristics that are adapted to the circumstances of the students, the learning environment and evaluation method which given at the end of the activity.

Game modification is needed in PJOK learning process. Through the game students will not feel learning but feel playing. So it can be interpreted that when students play games the students are actually learning. The nature of the sports game is designed using an approach to problem solving. Volleyball as an example the main point of the game is about how to hit the ball so that it can pass through the net that stretches in the middle of a field with a certain height. Some of the main rules on the game are made to regulate how to solve "various basic problems". If the main rules are changed, the game will be changed or no longer match the nature of the game. Unlike the case if the change is "secondary" regulations or regulations that are not the main rule. Some secondary regulations that can be modified are: a. Size, weight, material or form of equipment used b. Area or place of play and size of field c. Length of playing time d. Number of players in one team e. Rules for playing f. The size of the goal / basket, net height or obstacle g. Rotation or position of the player h. How to obtain values etc [5], [13].

For children, the game functions are: 1) mental value, 2) physical or health value, 3) social value. This mental value includes: a. needs of children of new experiences, b. needs of children of security, c. needs of children to be recognized, d. needs of children to participate. e. needs of children to feel happy. Physical or health value, when moving in playing, of course accompanied by excitement. A happy atmosphere has an influence on the release of hormones that stimulate body growth. Therefore, the delivered PJOK materials are directed to the game so that the atmosphere is encouraging. Social value, children who are playing happily will have a free mental atmosphere or escape obstacles. Unconsciously the value covered so far will appear because of freedom. So that teachers will be easily to know the characteristics of children when playing. In addition, sportivity will encourage a sense of unity, togetherness, responsibility in the group and its members, cooperation, and a sense of prioritizing group needs rather than personal needs [17].

The form of the game in this study is a modification of the big ball game. The game can be modified by considering the things below:

- Fun, the game must be able to please all members or players who play.
- Active, all players must be active.
- Safe, all games must involve fair opportunities
- Skills, the game must contain or require their own skills.
- Equipment, the game must be easily played without complicated equipment need such as needing a computer.
- Time, the game must have a break to rest
- Divided, the game must have a level or part so there is time to practice
- There is referee or not, the game must be simple so that it can be played whether there is a referee or not.
- Assessment, the game must be simple in assessment so that the player can calculate on their own without help from others.

The form of the game in this study are as follow:

1. Football game

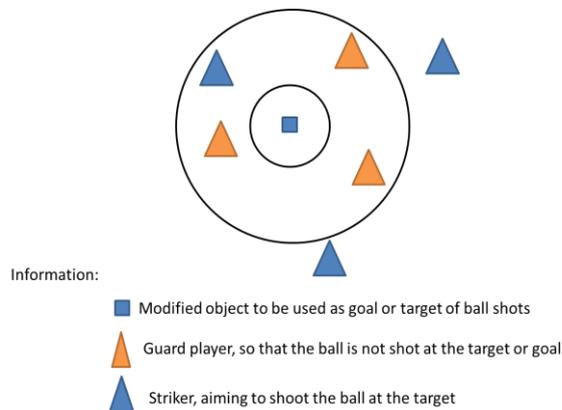


Figure 1. Modified Football Game

Football games can be modified by using rules in accordance to the rules and provisions in modifying the game as the above theory. The game use the following rules:

- Striker is the player holding the ball. And guard players are players who keep the ball from being shot to the target.
- Guard players may not take the ball outside the large field and cannot enter the small circle to prevent it from being attacked.
- The game is won by the team that is most about the target during the match. Keep in mind the striker is not allowed to attack by deliberately in order to injure the guard by shooting the ball directly at the opponent.
- This game can be played 2 times 5 minutes or 10 minutes with a given break.
- This game is played like football. Players pass the ball to their friends and try to shot with various strategies.

2. Basketball game

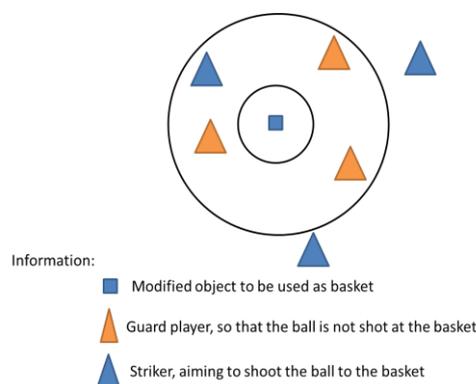


Figure 2. Modified Basketball Game

The modified basketball game uses rule as follows:

- The attacking player is the player holding the ball. And guard players are players who keep the ball from being entered into the target area.
- Guard players may not take the ball outside the large field and cannot enter the small circle to prevent it from being fired.
- The game is won by the team that puts the most goals in the game. Keep in mind the attacker is not allowed to attack by deliberately injuring the guard by shooting the ball directly at the opponent.
- This game can be played 2 times 5 minutes or 10 minutes and given a break.
- This game is played like a basketball. Players give feedback to their friends and try to target with various strategies

3. Volleyball game

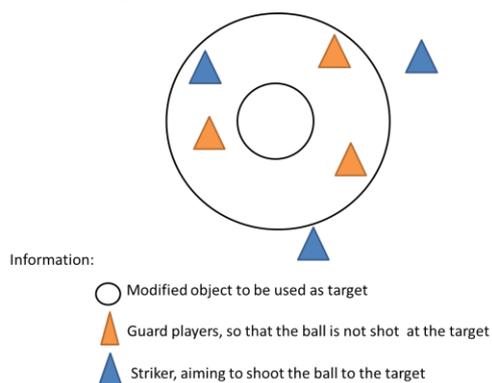


Figure 3. Modified Volleyball Game

Modified volleyball games uses rule as follows:

- The attacking player is the player holding the ball. And the guard player is a player who keeps the ball from being inserted into the basket.
- Guard players may not take the ball outside the large field and cannot enter the small circle to prevent it from being fired.
- The game is won by the team that puts the most goals in the game. Keep in mind the attacker is not allowed to attack by deliberately injuring the guard by shooting the ball directly at the opponent.
- This game can be played 2 times 5 minutes or 10 minutes and given a break.
- This game is played like a volleyball. Players give feedback to their friends and try to target with various strategies

The game above is played by all students by forming their own groups. During the game the teacher walks around to monitors all groups by giving direction to the game and when the game ends, the educator provides an evaluation related to the game. During activity the teacher directs the students to move

correctly in the game. So that every student moves various ways as their efforts in order to win the game.

The game can improve the quality of the learner's movement, and when moving it also bring up values. When moving proportionally, it can activate brain cells to work optimally. The brain itself consists of two parts: the left hemisphere and the right hemisphere. The left brain hemisphere is related to scientific thinking, critical, logical and linear abilities, while the right brain hemisphere is related to non linear, non verbal, holistic, humanistic, and even mystical functions. The birth of creativity in the form of ideas and real work is a combination of the two hemispheres of the brain [17].

Education is very important to create creative students. It can be seen in the Partnership for 21st Century Skills, Education & Competitiveness [10], [11] which shows the need for a generation of flexible and adaptive, initiative and independence, social and cultural skills, productive and accountable as well as leadership and responsibility towards technological development. Furthermore, based on the Tough Choices or the Tough Times National Center on Education and the Economy [12], [14] states that creativity is the main key to success along with the development of a sophisticated era. In the world of work, workers who have a high creative level are needed. This is where PJOK participates in creating or providing stimulation so that the learning process is able to improve higher-order thinking skills, especially creative thinking.

To create students who have creative provision for the future can be started from the existing learning process. Krathwohl [3] states that the highest ability is creative and this is formed by learning various combinations of dimensions of knowledge. The curriculum in the education unit becomes the basis for conditioning the learning process can develop creative thinking for students, critical problem solving, and communication and collaboration. According to Carroll [2], ; Trilling & Fadel [15] stated the need for new transformations and standards for students by replacing basic skills and knowledge competencies from the past. Departing from the things above the researcher, aims to determine the effect of motion activity through the game. Researchers plan to carry out research with the title "Motion activity through games on the creative thinking skills of students".

II. METHOD

This research is a quasi-experimental study by using The Posttest-Only Control Group Design[7] it is a research design consisting of two groups of treatment and control groups. This research design, subjects were randomly placed in groups and exposed as independent variables and given a post test. Post test score are then compared to determine the effectivity of treatment. Sample was randomly assigned on two schools. This research has the assumption of similar grade of VIII and taught PJOK subject. The study population is all eighth grade students in SMP Negeri 1 Diwek and SMP Negeri 5 Jombang. The sampling technique in this study uses random sampling in each class.

This research variable consists of dependent variables, it is the activity of motion through games and conventional given

by the teaching teacher. The dependent variable of this study is the test of students' creative thinking. The population of this study was all eighth grade students of SMP Negeri 1 Diwek. The sample of this study was taken by class random sampling technique. Based on the sampling technique, it was obtained 68 students. Data collection of this study uses students' thinking tests by using worksheet tests to measure 1) fluency in the use of words in finding certain structural requirements, 2) smooth reorganization of perceptions of a given word, 3) fluency in expression, 4) fluency in giving ideas, 5) flexibility in thinking, 6) ability in developing ideas. The data in this study were analyzed in stages, namely: data descriptions, prerequisite tests, and hypothesis testing. The prerequisite test is to test the data distribution normality, test variance homogeneity, and differences. The calculation of this study uses SPSS 20 and uses a significance level of 0.05.

III. RESULT AND DISCUSSION

The data obtained in this study are then calculated according to the needs of the analysis. This study focuses on differences in creative thinking skills between schools that are treated with comparative or conventional schools. Description of the data presented and grouped aims to find the level of students' creative thinking skills. The experimental group in this study was the SMP N 1 Diwek school while the control group was the SMP N 5 school. The description of the results of this study can be seen in the following table.

TABLE I. THE DIFFERENCES OF CREATIVE THINKING SKILLS IN COMPARATIVE AND CONVENTIONAL SCHOOL

Group	N	Mean	Std. Deviation	Std. Error	Min	Max
Experiment (SMPN 1 Diwek)	34	87.32	5.34	.959	75	96
Control SMP N 5 Jombang	34	72.87	5.26	.946	63	85
Total	68	80.09	8.98	1.141	63	96

Based on the data obtained can be described that the mean of the experimental group was 87.32 and the control group 72.87. The different meanings, of course it can be concluded that the largest average of 87.32 is obtained by the experimental group. While the control group obtained a value of 72.87.

The data obtained needs to be analyzed to test the hypothesis. The Levene's test and the Kolmogorov-Smirnov test were carried out. Levene's test and Kolmogorov-Smirnov test are conducted to find out whether the data is distributed following normal data distribution or not. After this test, the data is tested comparatively. Below is a test for homogeneity and normality

TABLE II. LEVENE'S TEST OF EQUALITY OF ERROR VARIANCES A DEPENDENT VARIABLE

F	df1	df2	Sig.
.098	1	60	.755

The tests results showed that there is null hypothesis that the error variance of the dependent variable is equal across groups.

TABLE III. ONE-SAMPLE KOLMOGOROV-SMIRNOV TEST

		Test Result
N		68
Normal Parameters a,b	Mean	80.0968
	Std. Deviation	8.98397
Most Extreme Differences	Absolute	.111
	Positive	.111
	Negative	-.094
Kolmogorov-Smirnov Z		.876
Asymp. Sig. (2-tailed)		.426

The tests results showed that the distribution of the population is normal.

Based on the table above the data is said to be homogeneously distributed if the significance level is more than 0.05. The significance value of the homogeneity analysis prerequisite test results is 0.755. This result can be concluded that the data is normally distributed and can continue to the next test. While to test the normality of the data is said to be normally distributed if the value of the significance level is more than 0.05. It can be seen from the table that the value of the Normality test is 0.426. So that it can be stated that the results are normal and can proceed to hypothesis testing.

After the prerequisite test is carried out then hypothesis testing is proceed. This hypothesis test is needed to answer the hypothesis whether there are differences or not from the experimental group. Based on the results of different test samples obtained data below.

TABLE IV. HYPHOTHESIS TEST RESULTS

	t-test for Equality of Means						
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
						Lower	Upper
Equal variances assumed	10.73	60	.000	14.45	1.35	11.75	17.15
Equal variances not assumed	10.73	59.98	.000	14.45	1.35	11.75	17.15

In the table above it can be seen that the results of the calculation of the data analysis shows that the probability value

of the learning strategy is more than 0.05 that is equal to 0,000. Thus the null hypothesis is rejected and the research hypothesis is accepted. This means that there is an effect of motion activity through the game on students' creative thinking. This result is also supported by Khushartanti's study which states that through motion learning is one of the principles in brain training [16].

Learning motion using the game will make children got benefit from fun and dynamic things. Good games pay attention to the physical and technical characteristics of skills in team sports, tactics and decision making. Ability is very important in order to win the game [18].

IV. CONCLUSION

Based on the data obtained can be described that the mean of the experimental group was 87.32 and the control group 72.87. The results of the calculation of the data analysis shows that the probability value of the learning strategy is more than 0.05 that is equal to 0,000. Thus the null hypothesis is rejected and the research hypothesis is accepted. This means that there is an effect of motion activity through the game on students' creative thinking. Based on the calculation, it can be seen that the activity of motion through the game towards students' creative thinking is a significant difference. The learning process it can be suggested that to stimulate students to think creatively can use the game or contain fun and dynamic activities. The process during learning should contain (1) learning experience, so that it can improve the students' ability to move; (2) availability of time or opportunity to increase maximum activity appropriately; (3) there is a level of all students; and (4) learning experience has the potential to integrate educational goals (skills, attitudes, and knowledge.

REFERENCES

[1] Betawi A, Jabbar S. Developmentally appropriate or developmentally inappropriate , that ' s the question : perception of early childhood pre-service teachers at The University of Jordan teachers at The University of Jordan. *Int J Adolesc Youth*. 2018;3843:1-11. doi:10.1080/02673843.2018.1458633.

[2] Caroll TG. Building a 21st Century U.S. Education System. the National Commission on Teaching and America's Future; 2007.

[3] Krathwohl DR. A Revision of Bloom ' s Taxonomy : 2002;41(4):212-219.

[4] Lynch T, Soukup GJ. " Physical education ", " health and physical education ", " physical literacy " and " health literacy " : Global

nomenclature confusion. *Cogent Educ*. 2016;1-22. doi:10.1080/2331186X.2016.1217820.

[5] Hastie. P. (2010). student Designed Games; Stategis for promoting creativity, and coopretion, and Skill Develemnt. Auburn University. Human Kinectics.

[6] J. E. Rink and T. J. Hall, "Research on Effective Teaching in Elementary School Physical Education Physical Education," vol. 108, no. 3, pp. 207–218, 2008.

[7] Cresswell. J.W. (2012). *Qualitative, Quantitative and Mixed Methods Approaches*. Third Edition. California: SAGE Publications. Diterjemahkan oleh Fawaid, A. (2012). *Research Design Pendekatan Kualitatif, Kuantitatif dan Mixed*, Edisi Ketiga.

[8] S. Silverman, "Thinking Long Term : Physical Education ' s Role in Movement and Mobility," 2005, pp. 138–147.

[9] S. Silverman and K. Mercier, "ScienceDirect Teaching for physical literacy : Implications to instructional design and PETE," *J. Sport Heal. Sci.*, vol. 4, no. 2, pp. 150–155, 2015.

[10] Munandar, Utami. (2012). *Pengembangan Kreativitas pada Anak Berbakat*. Jakarta: PT. Rineka Cipta.

[11] Partnership for 21st Century Skills, Education & Competitiveness A Resource And Policy Guide. Partnership for 21 St Century Skills, 2008.

[12] Tough Choices or Tough Times National Center on Education and the Economy. National Center on Education and The Economy, 2007.

[13] Siedentop. 1991. *Developing Teaching Skills in Physical Education*. California: Field

[14] Sani, R. A. (2015). *Pembelajaran Saintifik untuk Implementasi 2013*. Jakarta: PT Bumi Aksara.

[15] B. Trilling and C. Fadel. 21 St Century Skills Learning for Life in Our Times, First Edit. United States of Amerika: Jossey-Bass A Wiley Imprint, 2009.

[16] W. Kushartanti, "Gerak 7'(tujuh menit) yang mencerdaskan," pp. 1–16.

[17] Richar,Quay. 2014.*Routledge Studiens in Physical Education and Youth Sport. Contemporary Development in Sport game teaching*.New York: Routledge.

[18] Griffin, Joy I Butler; Linda L, More Teaching Games for Understanding (Human Kinetics;Champaign, 2010)