

# **1st International Conference of Physical Education (ICPE 2019)**

## **Empowering the Role of Physical Education in Industrial Revolution 4.0**

Advances in Social Science, Education and Humanities  
Research Volume 460

Padang, Indonesia  
29 August 2019

### **Editors:**

**Gusril  
Sefri Hrdiansyah  
Khainur Jannah**

ISBN: 978-1-7138-1620-1

**Printed from e-media with permission by:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571



**Some format issues inherent in the e-media version may also appear in this print version.**

Copyright© (2019) by Atlantis Press  
All rights reserved.  
Copyright for individual electronic papers remains with the authors.

For permission requests, please contact the publisher:

Atlantis Press  
Amsterdam / Paris

Email: [contact@atlantis-press.com](mailto:contact@atlantis-press.com)

Conference Website: <http://www.atlantis-press.com/php/pub.php?publication=icpe-19>

Printed with permission by Curran Associates, Inc. (2020)

**Additional copies of this publication are available from:**

Curran Associates, Inc.  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: 845-758-0400  
Fax: 845-758-2633  
Email: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

# TABLE OF CONTENTS

## **SESSION: PHYSICAL ACTIVITY**

THE EFFECT OF INTERVAL TRAINING ON AEROBIC ENDURANCE OF FOOTBALL CLUB PLAYERS OF PAYAKUMBUH .....	1
<i>Hafizzuddin Ahmad, Arsil, Syhrastani</i>	
THE CONTRIBUTION OF HAND-EYE COORDINATION AND ARM MUSCLE STRENGTH ON PUNCH ABILITY OF FOREHAND DRIVE OF TABLE TENNIS ATHLETES .....	4
<i>Zainul Johor, Ilham Rahmadiky</i>	
EFFECT OF HAND-EYE COORDINATION, CONCENTRATION AND BELIEVE IN THE ACCURACY OF SHOOTING IN PETANQUE .....	7
<i>Ari Purnomo, Yendrizal</i>	
THE DIFFERENCES OF ABILITY IN THE LEVEL OF DEVELOPMENT ON CONTROL OBJECTS OF EARLY CHILDHOOD EDUCATION STUDENTS IN PARIAMAN CITY AND PADANG PANJANG CITY .....	14
<i>Arie Asnaldi, Reki Yelis, Zulman, Atradinal, Lucy Pratama Putri, Syahril Bakhtiar</i>	
THE DIFFERENCES EFFECTS OF TRAINING METHOD AND NUTRITIONAL STATUS ON BASIC TECHNICAL SKILLS OF FOOTBALL CLUB PLAYERS IN MANDAILING NATAL .....	18
<i>Baik Wijaya, Umar, Arsil</i>	
PHYSICAL FITNESS OF STUDENT AT THE JUNIOR HIGH SCHOOL .....	22
<i>Berto Apriyano, Zainal Abidin Zainuddin, Asha Hasnimy Mohd Hashim</i>	
THE EFFECT OF LEG CIRCUITS EXERCISE TOWARD STRENGTH OF LIMBS MUSCLES OF FEMALE STUDENTS VOLLEY BALL TEAM .....	28
<i>Cevvin Septa Edran, Slamet, Ardiah Juita</i>	
THE EFFECT OF DRILLING METHOD TOWARDS OVERHAND PASSING ABILITY .....	31
<i>Desi Tri Susanti, Ishak, Hermamzoni</i>	
CONTRIBUTIONS OF ARM MUSCLE STRENGTH AGAINST FOREHAND DRIVE SKILLS FOR TABLE TENNIS ATHLETES .....	35
<i>Dessi Novita Sari, Indri Wulandari, Sefri Hardiansyah, Zulfahri</i>	
THE PHYSICAL FITNESS LEVEL OF SENIOR HIGH SCHOOL MALE STUDENTS IN PESISIR SELATAN .....	39
<i>Dezi Chandra, Damrah, Arsil</i>	
THE EFFECT OF PLYOMETRICS EXERCISE TO INCREASE THE ABILITY OF REBOUND .....	42
<i>O. Z Dio Bagus, Umar, Hendri Irawadi</i>	
CONTRIBUTION OF POWER FLOATING MUSCLE AND POWER FLOATING ARM MUSCLE ON SMASH ABILITY .....	46
<i>Dova Syafriandi, Donie</i>	
THE CORRELATION OF ARM MUSCLE EXPLOSIVE POWER, LEG MUSCLE EXPLOSIVE POWER, AND HAND-EYE COORDINATION TOWARDS THE SMASH OF BADMINTON PLAYER .....	50
<i>Febby Pratama</i>	

STUDY ON THE ABILITY OF ATHLETIC BASIC MOTIONS (RUN, JUMP AND THROW) OF DEAF STUDENTS IN PAYAKUMBUH.....	55
<i>Hendri Neldi, Asyifa Rahmadhanty</i>	
CONTRIBUTION OF LEG MUSCLE STRENGTH AND SPEED OF STUDENTS LONG JUMP ABILITY.....	59
<i>Ibnu Andli Marta</i>	
CONTRIBUTION OF THE MUSCLE STRENGTH AND THE STRENGTH OF THE ARM MUSCLE ON THE ABILITY OF THE 50 METER CHEST STYLE.....	63
<i>Isra Febriadi, Zarwan, Qalbi Amra</i>	
INFLUENCE OF EXERCISE MODEL LOAD ON SUPERIOR LIMB TO ENHANCEMENT ABILITY SWIMMING BUTTERFLY STYLE 50 METERS.....	66
<i>Leni Asril, Witarsyah, Umar</i>	
THE EFFECT OF EXERCISE METHODS ON PASSING CAPABILITY OF FOOTBALL CLUB PLAYERS OF PADANG.....	72
<i>Muhammad Qadavi, Randa Eka Putra, John Arwandi</i>	
REVIEW OF PHYSICAL CONDITION OF WRESTLING ATHLETES.....	76
<i>Nilla Dafer</i>	
CONTRIBUTIONS OF FLEXIBILITY TO SABIT KICK SPEED PENCAK SILAT.....	79
<i>Nurul Ihsan</i>	
THE EFFECT OF CIRCUIT TRAINING ON THE IMPROVEMENT OF DRIBBLING ABILITY OF JUNIOR PLAYERS.....	82
<i>Pahri Novera</i>	
THE EFFECT OF LIMB MUSCLE EXPLOSIVE POWER, FLEXIBILITY, AND CONFIDENCE TOWARD LONG PASSING ABILITY OF FOOTBALL PLAYERS.....	86
<i>Ridho Ilahi, Willadi Rasvid</i>	
EFFECT OF ENERGY DRINK CONSUMPTION OF AEROBIC ENDURANCE.....	88
<i>Sefri Hardiansyah, Fella Maifitri, Ade Zalindro</i>	
DEVELOPMENT OF COORDINATION TEST TOOLS.....	91
<i>Sri Gusti Handayani, Anton Komaini, Yohandri</i>	
CONTRIBUTIONS OF LEG POWER MUSCLE ON SICKLE KICK ABILITY OF PENCAK SILAT ATHLETES.....	95
<i>S Tri Juwanda, Zulrafla, Kamarudin</i>	
RELATIONSHIP OF EXPLOSIVE MUSCLE LIMBS AND LONG LEGS TO 100-METER RUNNING ABILITY.....	98
<i>Yuaddil Ihsan, Atradinal</i>	
EFFECT OF HAND-EYE COORDINATION ON THE CAPABILITY OF CHILDREN OBJECT CONTROL.....	101
<i>Zainul Johor, Romi Candra, Willadi Rasyid, Arie Asnaldi, Oktarifaldi, Syahrial Bakhtiar</i>	
EFFECT OF BODY MASS INDEX ON THE LEVEL DEVELOPMENT OF EARLY CHILDHOOD LOCOMOTORS CAPABILITIES IN CHILDREN AGED 5 TO 6 YEARS.....	105
<i>Zainul Johor, Muhammad Rizky Mezra, Khairuddin, Nirwandi, Oktarifaldi, Irfan Oktavianus, Syahrial Bakhtiar</i>	

THE CONTRIBUTION OF LEG MUSCLE EXPLOSIVENESS AND FLEXIBILITY ON THE ABILITY TO KICK DOLLYO CHAGI IN PADANG TAEKWONDO.....	109
<i>Sepriadi, Pribadita Firdaus Har</i>	
THE EFFECT OF PLYOMETRIC EXERCISE ON LEG MUSCLE EXPLOSIVE POWER OF PENCAK SILAT ATHLETES.....	114
<i>Suwirman, Weny Sasmitha</i>	
COMPARISON OF SERUM HIF-1A LEVELS IN SWIMMING ATHLETES BEFORE AND AFTER HYPOXIC NON-HYPOXIC EXERCISE .....	118
<i>Syahrastani, Argantos, Dwi Hilda Putri, Dezi Handayani, Siska Alicia Farma Alisirsyah</i>	
CAPABILITY ANALYSIS OF MAXIMAL OXYGEN VOLUME (VO <sub>2</sub> MAX) FOOTBALL PLAYERS .....	121
<i>Zarwan, Sefri Hardiansyah</i>	
HUMAN RESOURCE IN SPORT MANAGEMENT AND PHYSICAL FITNESS LEVEL BASED ON SPORTS DEVELOPMENT INDEX.....	124
<i>Andriansyah</i>	
EFFECT OF TRAINING FORM METHOD AND PLAYING METHOD ON THE BASIC TECHNICAL CAPABILITIES OF FOOTBALL PLAYERS U-15 .....	127
<i>Ofroki, Eddy Marheni, S Afrizal</i>	
EFFECT OF EXERCISE METHOD AND NUTRITIONAL STATUS OF ABILITY VO <sub>2</sub> MAX ON BASKETBALL PLAYERS PERFORMANCE .....	131
<i>Arsil, Muhammad Fakhurur Rozi</i>	
CONVENTIONAL METHODS AND COOPERATIVE EFFECT OF VOLLEYBALL BASIC SKILLS .....	134
<i>Damrah, Pitnawati, Mayang Kurniati</i>	
OVERVIEW OF THE PHYSICAL CONDITION OF FOOTBALL PLAYERS OF HIGH SCHOOL STUDENTS.....	137
<i>Darni, Ikhbal Elkadiowanda</i>	
COMPARISON OF PHYSICAL FITNESS BETWEEN JUNIOR HIGH SCHOOLS IN PAYAKUMBUH .....	142
<i>Deswandi, Eka Fatriani</i>	
EFFECT OF METHOD OF PLAYING ON PASSING ACCURACY OF FOOTBALL SCHOOL PLAYERS .....	146
<i>Emral, Andre Setiawan</i>	
OVERVIEW OF PHYSICAL CONDITION OF THE U-19 FOOTBALL SCHOOL STUDENTS IN PADANG PARIAMAN .....	149
<i>Yaslindo, Teguh Vernanda</i>	
INTRODUCE SOFT TENNIS SPORT IN WEST SUMATERA .....	154
<i>Pitnawati, Damrah</i>	
REVIEW OF PHYSICAL CONDITION OF FOOTBALL SCHOOL PLAYERS AGED 15 IN PADANG PANJANG .....	157
<i>Rosmaneli</i>	

EFFECT OF BALANCE ON DEVELOPMENT LEVEL OF THE LOCOMOTOR CAPABILITIES OF KINDERGARTEN CHILDREN .....	160
<i>Atradinal, Yudi Vetra, Jonni, Oktarifaldi, Risky Syahputra, Romi Mardela, Syahril Bakhtiar</i>	

EFFECT OF PYRAMID AND REVERSED PYRAMID LOAD EXERCISE ON ARM AND THIGH MUSCLE HYPERTROPHY .....	163
<i>Indra, Yanuar Kiram</i>	

CONTRIBUTION OF EXPLOSIVE POWER MUSCLE ARMS AND CONCENTRATION OF FLOATING SERVICE IN VOLLEYBALL .....	167
<i>Erianti, Yuni Astuti, Zulbahri</i>	

### **SESSION: TECHNOLOGY**

RELATIONSHIP OF INTELLECTUAL INTELLIGENCE LEVEL WITH HIGH SCHOOL BASKETBALL SHOOTING ABILITY .....	173
<i>Hasriwandi Nur, Freno Celvin Pradana</i>	

THE EFFECT OF MOTOR SKILLS ON THE ELEMENTARY SCHOOL STUDENTS' PHYSICAL FITNESS .....	177
<i>Mahardynata Fahmi, Wilda Wellis</i>	

### **SESSION: EVALUATION**

RELATIONS OF INTERESTS, INTELLIGENCE AND STUDENT LEARNING OUTCOMES IN THE SUBJECT OF ATHLETIC IN FACULTY OF SPORT SCIENCE, UNIVERSITAS NEGERI PADANG .....	180
<i>N Erizal, Oktarifaldi, Hasriwandi Nur</i>	

PHYSICAL EDUCATION, SPORTS AND HEALTH TEACHER PERFORMANCE IN PRIMARY SCHOOLS OF PADANG .....	184
<i>Fitri Lavenia, Edwarsyah</i>	

PROFILE OF MALE STUDENTS' PHYSICAL FITNESS IN RIAU .....	187
<i>Indra Tri Handoko</i>	

COMPETENCY ACHIEVEMENT OF PHYSICAL EDUCATION, SPORTS AND HEALTH TEACHERS IN HIGH SCHOOLS OF PADANG PARIAMAN .....	191
<i>Masrudi Suryanto, Erizal Nurmai</i>	

COMPETENCE OF PHYSICAL EDUCATION, SPORTS AND HEALTH TEACHERS IN ELEMENTARY SCHOOLS OF LUBUK SIKAPING .....	195
<i>Muhammed Hangga Razaak, Nurul Ehsan, Atradinal</i>	

THE VALIDITY OF ATHLETIC SPORTS MODELS FOR ELEMENTARY SCHOOL STUDENTS TO IMPROVE GROSS MOTOR SKILLS AND SELF-CONCEPT .....	199
<i>Rifki Nanda Putra, Bafirman, Fuaddi</i>	

MOTOR ABILITY AND PLAY ACTIVITY OF SUKU ANAK DALAM (KUBU) IN JAMBI .....	204
<i>Tommy Andherson, Gusril</i>	

THE EFFECT OF PARENTS' ATTENTION, PHYSICAL FITNESS AND STUDENTS' MOTIVATION IN LEARNING PROCESS TOWARD STUDENTS' ACHIEVEMENT OF SPORT STUDY .....	206
<i>Yuhanda Gustian, Kamal Firdaus</i>	

EFFECTS OF EDUCATIONAL BACKGROUND, PARENTAL ECONOMICS, STUDENT NUTRITION STATUS ON MOTORIC CAPABILITIES OF PRIMARY SCHOOL STUDENTS .....	211
<i>Yusal Fitriko, Yanuar Kiram</i>	

THE EFFECT OF HAND-EYE COORDINATION AND GENDER ON THE CHILDREN ABILITY OF OBJECT CONTROLLING .....	216
<i>Jonni, Engga Randa Putra, Suci Nanda Sari, Lucy Pratama Putri, Risky Syahputra, Syahrial Bakhtiar</i>	

### **SESSION: TEACHING METHOD**

REVIEW OF NUTRITION STATUS AND THE LEVEL OF PHYSICAL FITNESS OF HIGH SCHOOL STUDENTS.....	220
<i>Agung cahyadi</i>	

IMPROVING THE PASSING SKILLS THROUGH THE PHASE OF PLAY FILANESIA METHOD AND PLAYING TRAINING METHOD FOR STUDENTS UNDER 17 YEARS .....	223
<i>Agung Hilmi Wahdi, Arsil</i>	

THE INFLUENCE OF TRAINING METHOD ON STUDENTS' LEARNING ACHIEVEMENT OF GROUNDSTROKE IN TENNIS .....	226
<i>Dedi Fardian</i>	

INFLUENCE OF RECIPROCAL TEACHING STYLE AND EXPLORATION OF ELEMENTARY STUDENTS MOTOR ABILITY .....	228
<i>Hilmainur Syampurma</i>	

PENCAK SILAT BASIC MOTION LEARNING THROUGH TACTICAL APPROACH FOR JUNIOR HIGH SCHOOL STUDENTS.....	233
<i>Weny Sasmitha, Suwirman, Ikhwanul Arifan, S Dessi Purnama</i>	

THE INFLUENCE OF LEARNING STRATEGY IN A SERIES OF GAMES FOR KINDERGARTEN STUDENTS .....	237
<i>Willadi Rasyid, Zainul Johor, Heru Afrian, Arie Asnaldi, Oktarifaldi, Syahrial Bakhtiar</i>	

EFFECT OF UP-DOWN STAIRS EXERCISE AND HURDLE JUMP ON LIMB MUSCLE EXPLOSIVE POWER OF VOLLEYBALL PLAYERS .....	241
<i>Yuni Astuti, Erianti</i>	

REVIEW ON THE IMPLEMENTATION OF PHYSICAL EDUCATION LEARNING.....	246
<i>Syafruddin, Uswatul Hasanah</i>	

EFFECT OF THE TEACHING GAMES FOR UNDERSTANDING (TGFU) METHOD IN IMPROVING STUDENTS' MOTIVATION AND PHYSICAL FITNESS.....	250
<i>Syamsuar, Zelhendri Zen, Reflianto</i>	

ROLE OF MOTIVATION, CREATIVITY, AFFECTIVE AND IMPLICATIONS IN THE TEACHING AND LEARNING PROCESS OF PHYSICAL EDUCATION .....	256
<i>Zulbahri, Nugroho Susanto, Dessi Novita Sari</i>	

REVIEW OF JUNIOR HIGH SCHOOL STUDENTS PHYSICAL FITNESS .....	259
<i>Zulman, Yosan Neni Saputra</i>	

THE CONTRIBUTION OF PHYSICAL FITNESS AND LEARNING MOTIVATION ON LEARNING RESULTS OF SPORTS SPECIALTY .....	262
<i>Emil Mon, Gusril, Adnan Fardi</i>	

**SESSION: HEALTH EDUCATION**

IMPLEMENTATION OF SCHOOL HEALTH UNIT IN A ELEMENTARY SCHOOL ..... 265  
*Ali Umar, Ivan Adhi Purbaya*

CONTRIBUTIONS VO2MAX ON THE DRIBBLING AGILITY OF THE FOOTBALL CLUB  
PLAYERS ..... 268  
*Amrial Subrata*

THE STUDENT INTEREST IN PARTICIPATING IN THE HEALTHY INDONESIAN  
GYMNASTICS AT ELEMENTARY SCHOOL LEVEL ..... 271  
*Mutia Jana, Ali Asmi*

IMPLEMENTATION OF THE LEARNING PROCESS OF PHYSICAL EDUCATION, SPORT,  
AND HEALTH ..... 273  
*Rendy Hardi Putra, Zarwan, Nurul Ihsan*

SCHOOL’S HEALTH CLINIC EVALUATION IN A PRIMARY SCHOOL OF SOLOK ..... 276  
*Rika Sepriani, Bobby Oktariza*

NUTRITIONAL STATUS AND STUDENTS PHYSICAL FITNESS IN A JUNIOR HIGH  
SCHOOL OF PADANG ..... 279  
*Riwaldi Putra, Rosmaneli*

OVERVIEW OF NUTRITIONAL STATUS OF PUBLIC ELEMENTARY SCHOOL STUDENTS  
OF SIJUNJUNG ..... 282  
*Edwarsyah, Yopi Hidayatullah*

OVERVIEW OF STUDENTS’ PHYSICAL FITNESS IN PADANG ..... 285  
*Nirwandi, Ahmad Hasan, I Wulandari*

**SESSION: CURRICULUM**

IMPLEMENTATION OF THE PHYSICAL EDUCATION, SPORT AND HEALTH LEARNING  
PROCESS BASED ON THE 2013 CURRICULUM IN JUNIOR HIGH SCHOOLS OF  
PARIAMAN ..... 288  
*Nurul Layla Fitri, Rosmawati, Hendri Neldi*

IMPLEMENTATION OF THE PHYSICAL EDUCATION, SPORT AND HEALTH LEARNING  
PROCESS BASED ON THE 2013 CURRICULUM IN ELEMENTARY SCHOOLS OF  
PADANG ..... 291  
*Putri Annisa Ibnus, M Madri*

**SESSION: TEACHING MEDIA**

DEVELOPMENT OF GAME-BASED BASIC MOTION LEARNING MODELS FOR  
ELEMENTARY SCHOOL STUDENTS ..... 295  
*Gusnani, Zalfendi, N Erizal, Nurul Ihsan*

**Author Index**