



Part of **SPRINGER NATURE**

PROCEEDINGS | JOURNALS | BOOKS

Search



Series: **Advances in Social Science, Education and Humanities Research**

Proceedings of the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)

HOME



Welcome to the 2019 South Borneo International Conference on Sports Science and Education (SBICSSE 2019). The conference took place at the Aria Barito Hotel in Banjarmasin, Indonesia on November 28, 2019. The seminar was conducted by the Department of Sport and Health Education, Faculty of Teacher Training and Education, Lambung Mangkurat University. The main purpose of this conference is to share knowledge and experience to accelerate regional development, including the development of the sports and entrepreneurial industry, based on empirical research, and theoretical approaches.

Please click [here](#) for the conference website.

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 Social Science, Education and Humanities Research](#)

Proceedings of the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)

PREFACE

The 1st South Borneo International Conference on Sport Science and Education (SBICSSE) “Reviving The Golden Age of South Borneo History: Boosting Entrepreneurship and Industry”
Banjarmasin, November 28th, 2019

Honorable, Chancellor of Lambung Mangkurat University,
Honorable, Vice Chancellor of Lambung Mangkurat University
Honorable, Deans and Vice Deans of the Teaching and Education Faculty, all
Heads of Departments and Study Programs at the Teaching and Education
Faculty,
Honorable and distinguished Speakers,
Distinguished Delegated and Guests,
Dear Fellow Participants,
Ladies and Gentleman,

Assalamu'alaikum Wr. Wb.

Welcome to the 2019 South Borneo International Conference on Sports Science and Education (SBICSSE 2019). The conference took place at the Aria Barito

Hotel in Banjarmasin, Indonesia on November 28, 2019. The seminar was conducted by the Department of Sport and Health Education, Faculty of Teacher Training and Education, Lambung Mangkurat University. The main purpose of this conference is to share knowledge and experience to accelerate regional development, including the development of the sports and entrepreneurial industry, based on empirical research, and theoretical approaches. This is the best opportunity to discuss regional development from an interdisciplinary perspective.

We invite scholars, academic staff, teachers, students, private sector managers, and government officials to participate in this conference. The main themes are sub-organized by the following sub themes:

1. Enhancing Cognitive Skills and Critical Thinking in the Digital Age
2. Educational Challenges in Facing Industrial Development 4.0
3. Economic Value and Regional Sports Industry Development
4. Local Wisdom from Historical Perspectives to Enhance Entrepreneurship
5. Critical Issues about Gender and Sports Development in Indonesia
6. Revive People's Sports and Health Promotion to Improve Quality of Life in Rural Areas
7. Sports Disability and Empowerment
8. Community Sports Development (CSD)

The main speaker at this conference is; (1) Associate Professor Hallam Pereira Hallam Pereira (Edit Cowan University, Western Australia): Strategy of Sport Industry Development: Lesson from Australia. (2) Prof. Tom Martinek, Ed.D, North Carolina University, USA. (3) Prof. Fan Hong (UK): Lesson from China on Belt and Road Policy: East Meet West (4) Dr. Aman Saleh (Malaysia): Reviving Folks Sports and Malay's Resilience Culture for Promoting Health and Well-Being. (5) Dr. Taufik Arbain, M.Si. (ULM) The Heritage of Banjar Kingdom from the perspective of social inclusion and entrepreneurship education.

SBICSSE received 61 papers which were presented at plenary sessions and parallel sessions. On behalf of the Committee, our sincere thanks went to the

Chancellor of Lambung Mangkurat University, Dean of the Teaching and Education Faculty, Chair of the Sports and Health Department, advisory board steering committee, committee members, reviewers, presenters, and participants. Specially accept also Atlantis Press Proceedings Conference. Finally, we hope that this 2019 SBICSSE will provide the best benefit for the advancement of knowledge and sports. See you at the next conference.

Thank you
Chair

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 Social Science, Education and Humanities Research](#)

Proceedings of the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)

ARTICLES

Search

+ Advanced search

SEARCH

61 articles

Proceedings Article

[Cognitive Bias in a Disruptive Era: How Thinking Patterns Affects Academic Performance and Health](#)

Ali Maksum, Fifuka D. Khory

In a disruptive era marked by rapid changes and an abundance of information, the occurrence of cognitive biases becomes difficult to avoid. Individuals are more confident in something perceived than the facts and actual data. Emotions are stronger than reason. In a neuropsychological perspective, people...

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



Proceedings Article

The Development of Physical and Psychological Training Models to Improve Football Performance

Asep Angga Permadi

Sports Coaching is an activity or method that is useful for developing skills and abilities and increasing the capacity of human resources (HR). One way to achieve excellent physical condition is to do physical training that requires skills and awareness in sports. Football requires technical, tactical...

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

Proceedings Article

Problematic Education Physical Students in the Wetlands

Herita Warni, Syamsul Arifin, Ramadhan Arifin

Learning of Physical Education in schools is often faced with the availability of facilities that are not adequate. From the observation of some schools, the majority of schools do not have adequate facilities and space to be able to do with a good physical education. This causes physical education process...

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

Proceedings Article

Instruction of Women Goalkeepers' in Indonesian Futsal

Nusantara League 2019

Desrio Windoro, Agus Kristiyanto, Slamet Riyadi

This article is intended to determine the instructions of women goalkeeper's profiles in the Indonesian Futsal League 2019. The method that is used is observational by doing observations directly in the Indonesian Futsal Nusantara League. This event was held at Sasana Krida Building at Purwokerto Central...

[+ Article details](#)

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

Proceedings Article

Analyzing the Challenges to Using Technology in Physical Education

Gita Febria Friskawati, Vicki Ahmad Karisman, Mesa Rahmi Stephani

This survey research aims to explore the challenges of using technology in Physical Education. The data was taken through a survey using an open-ended questionnaire that has been distributed through Google forms which were distributed over two months and five days. The population is 49 Physical Education...

[+ Article details](#)

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

Proceedings Article

Evaluation Program of Student League Competition U-12 Menpora Cup 2017

Budi Ariyanto Muslim, Taufik Hidayat Suharto, Tommy Rizki Prasetyo

The purpose of this study is to evaluate the Program of Student League

Competition U-12 Menpora Cup 2017. This research uses qualitative techniques with an evaluation approach using the Context model, Input, Process, and Product (CIPP). Methods of data collection in triangulation using questionnaires,...

[+ Article details](#)

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

Proceedings Article

The Learning Effectiveness of Basic Throwing Movement Through Playing Approach

Mashud

This research aimed to produce learning effectiveness of basic throwing movement. The study was conducted by involving research subjects' namely physical education teachers and first grade students of SDN Loktabat 7. This research used classroom action research method (action research) which has several...

[+ Article details](#)

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

Proceedings Article

Physical Condition and Self-Control Improves the Ability of Back Attack in Volleyball

Bujang, Aridhotul Haqiyah

This research aims to determine the effect of power, flexibility, and self-control towards the ability of back attack volleyball. The research method is a survey, and the analysis technique is path analysis. This research was held at the Islamic University of 45 Bekasi with a population of 30 athletes...

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

Proceedings Article

The Effect of Angle Hop and Squat Jump Exercise on Leg Power in Futsal

Azi Faiz Ridlo, Muhammad Fajar Fardy

This study aims to determine the effect of angle hop and squat jump exercises on leg power in Futsal Extracurricular participants at Al-Azhar 18 Grand Wisata High School. The method used in conducting this research is an experimental method with a purposive sampling technique. The sample in this study...

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

Proceedings Article

Sport Entrepreneurs' Perspective on 4.0 Industrial Era

Mochamad Arifin, Muchamad Arif Al Ardha

Internet is a key factor of 4.0 industrial era. It provides opportunities for sport industry to develop well. However, the important issue is how to manage the sports industry to be adaptable with the 4.0 industrial era. This study aims to inquire the perspective of sports entrepreneurs on managing their...

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

Proceedings Article

The Effect of Push-Up Exercise with Wrist Flicking on the Ability of Three Point Shooting of BSWJ Club Basketball Players

Ahmad Maulana, Herita Warni, Syamsul Arifin

This study aimed to determine the effect of push-up exercise with wrist flicking on the ability of basketball three point shooting in BSWJ Club Age 16 – 18 Years. The method used was pre-experimental design. The population in this study was all 20 players of BSWJ basketball Club Age 16-18 years. All...

[+ Article details](#)

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

Proceedings Article

Need Analysis of Multi-Ball Exercise Methods Toward the Improvement of Forehand Drive Skill on Beginner Table Tennis Athletes

Bessy Sitorus Pane, James Tangkudung, Abdul Sukur

This study aims to determine the needs for table tennis multi-ball training for table tennis practice participants at the Table Tennis Association (Persatuan Tenis Meja; abbr.: PTM) in Medan. This research uses a descriptive qualitative method. Subjects were 20 beginner athletes aged 16–21 years. The...

[+ Article details](#)

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

Proceedings Article

The Effect of Knee Tuck Jump Plyometrics Training on Dollyo Chagi Athlete Taekwondo

Fakhruddin, AR. Shadiqin, Tri Irianto

This study aims to figure out the effect of plyometrics knee tuck jump exercise towards dollyo chagi kick speed of junior taekwondo athletes. The method in this study is pre-experiment design. The sample is 12 junior taekwondo athletes at Banjarbaru, Indonesia. Instrument or measuring instrument used...

[+ Article details](#)

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

Proceedings Article

Development of Overhand Serves Learning Techniques in Volleyball Game

Destriana, Endang Switri, Herri Yusfi

The purpose of this study was to see the validation of the development of overhand serves learning techniques in volleyball games for 9th-grade junior high school students. This Research used the Research and Development method using ADDIE design (Analyze, Design, Development, Implementation, and Evaluation)....

[+ Article details](#)

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

Proceedings Article

The Effect of Shadow 8 Training on Agility of Badminton Players Ages 12–15 Years

Taufiq Rahman, Syamsul Arifin, Herita Warni

This study aims to determine the effect of 'shadow eight training' on agility of PB badminton players ages 12–15 years. The research method used was a pre-experiment design method. The sample in this study were 10 badminton players who were at 12–15 years old taken from Mustika training centre Indonesia....

[+ Article details](#)

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



Proceedings Article

The Effect of Zig-Zag Run Training on Increasing the Agility of Soccer Players

Ramadhan Arifin, Gumilar Mulya, Edwin Wahyu Dirgantoro

The purpose of this study is to determine the effect of Zig-zag run training on increasing agility in soccer players Department of sport education and health ULM Banjarbaru, Factors affecting the age, sex and body weight, being overweight can reduce the speed of muscle contraction, which will reduce...

[+ Article details](#)

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

Proceedings Article

Development of Basic Motion Learning Models Based on Traditional Games in Early Childhood

Reza Resah Pratama, Sukirno, Syafaruddin

This study aims to analyze the effectiveness of traditional game-based basic learning models for early childhood. This study uses a pre-experimental research design in the form of one group pre test-post test design. The research sample is 80 children aged 4–6 years Palembang. The instrument used was...

[+ Article details](#)

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

Proceedings Article

The Effect of Plyometric Double Leg Speed Hop Exercise or Explosive Muscle of Volleyball Players

Suadmaji, Syamsul Arifin, Herita Warni

This study aims to determine the effect of double leg speed hop plyometric exercises on leg muscle explosive power of volleyball players. The research method used is the pre-experiment design by conducting an initial test, 18 meetings for the treatments and a final test. The sample in this study were...

[+ Article details](#)

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

Proceedings Article

Implementation of Inquiry Learning Model to Improve Pencak silat Learning Outcomes

Norma Anggara, Perdinanto

The purpose of using inquiry strategies in learning is to develop the ability to think systematically, logically, and critically, or develop intellectual abilities as part of mental processes. Thus, in inquiry students are not only required to master the subject matter but also how they can use their...

[+ Article details](#)

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

Proceedings Article

Effect of Physical Fitness Exercises in 2012 and New Indonesian Gymnastics Exercise (SRIBU) Exercises on Physical Fitness Level of Female Students

Hj. Aminah, AR. Shadiqin, Maruful Kahri

SKJ-2012 is a series of gymnastic movements aimed at improving or

maintaining physical fitness launched in 2012. This study aims to determine the effect of the SKJ 2012 and New Indonesian Gymnastics Exercise (SRI) exercises on the physical fitness level of female students. The research method used...

[+ Article details](#)

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

Proceedings Article

The Influence of Drill Exercise and Eye Coordination Foot Methods Toward the Smash Skill of Badminton

Andi Taufan Bayu Dewantara Alsaudi

Focus on the primary concern in the game of badminton is the smash skill, in this case it is the skill in doing the smash badminton. As for the training method used is a method of exercise drill. Based on the study of the problems to be studied and a goal to be achieved, then the form used in this study...

[+ Article details](#)

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

Proceedings Article

A Study on the Quality of South Kalimantan Athletes on National Student Sports Week–2019

Aryadi Rachman, Nurdiansyah

This study aimed to evaluate the physical condition of the strength and endurance of athletes Pomnas South Kalimantan 2019. This study was a descriptive study with the percentage of test and measurement techniques in data collection. The population is Athlete Pre Pomnas (National Student Sports Week)...

[+ Article details](#)

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



Proceedings Article

Strengthening the Brotherhood of Ethnic Groups Rope Through Sport

Yudo Harvianto

Sport is a human physical activity in various ways he pleases. But this time, the sport is not only used as a community physical activity to nourish the body only but not least in some regions, and even the world makes the sport as an instrument to achieve specific goals. Because the sport is not only...

[+ Article details](#)

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

Proceedings Article

The Difference of Backhand Drive Ability Using Internal Drive Method and Drive Crosscourt Method for Tennis Players

Lazuardy Akbar Fauzan, H. Sarmidi

This study challenges the differences in Backhand Driveability using the Inside Drive and Crosscourt Drive Method for Tennis Players in the Age Group of 12–15 Years. The research method used was a pretest and posttest group design. The results of this research are that the exercise using the drive inside...

[+ Article details](#)

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

Proceedings Article

Decreased Level of Fatigue in Aerobic Sports in the Use of Vitamin C

Junaidi, Tirto Apriyanto

This study aims to obtain information about reducing the level of fatigue in aerobic exercise in the use of vitamin C. This study uses an experimental method with correlational techniques, the sample used is the FIK-UNJ coaching study program students. Sampling using a purposive sampling technique. Hypothesis...

[+ Article details](#)

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

Proceedings Article

The Effect of Three Corner Drill Training Against Futsal Playback Probability

Muhammad Fadillah, H.M Kusaini, Edwin Wahyu Dirgantoro, Abd. Hamid

This research aims to determine the presence or absence of the effect of the ladder drill in-out shuffle exercise towards the agility on the futsal players of Junior High School SMK Negeri 1 Barabai. The research method used is the quasi-experiments method (pre-experimental design) by implementing the...

[+ Article details](#)

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

Proceedings Article

The Effect of Plyometric Knee Tuck Jump and Barrier Hops Training on Explosive Muscle Explosion Futsal Player

Mathlaul Anwar, Sunarno Basuki, Tri Irianto

The futsal players of SMAN 3 Banjarmasin have weak passing and shooting;

therefore, the researchers argue that the futsal players of SMAN 3 Banjarmasin do not have good leg muscle explosive power. This study aims to determine the effect of Plyometric knee tuck jump and barrier hops exercises on the explosive...

[+ Article details](#)

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

Proceedings Article

Improving Learning Outcomes of Motion Short Distance Run with the Basic Approach to Play

Eka Purnama Indah, Endang Pratiwi

This study aims to determine the basic learning outcomes of short distance running with the approach of playing students at TK Taruna Banjarmasin, South Borneo, through the play approach. This research is a classroom action research. The study was conducted in two cycles, which consisted of planning,...

[+ Article details](#)

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

Proceedings Article

Kindergarten Teachers' Perception on Basic Movement Skills Understanding Through Rhythmic Gymnastics Movement

Noviria Sukmawati, Firmansyah Dlis, Ramdan Pelana

This study aims to analyze the basic movement needs in rhythmic gymnastics movements on the physical learning of kindergarten children. This research was conducted in Sidomulyo State Kindergarten, At-Taqwa Kindergarten, and Qurrotaayun Kindergarten. The subjects of this study were 20 teachers. The method...

[+ Article details](#)

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

Proceedings Article

Training Using Wrist Forearm Modification Tool

Gustama Setiyadi, Tri Irianto, Ma'ruful Kahri

The javelin throw requires an efficient release angle. The angle is at 30 ° to 36 °. Observations made on the ground in novice athletes are used as a single sample because athletes have difficulty directing the javelin to get the correct throw angle. Athletes that perform javelin with reduced ability...

[+ Article details](#)

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

Proceedings Article

An Evaluation of Extracurricular Coaches of Elementary School Sports Club

Risa Zuardi, Tri Irianto, Sunarno Basuki

This study aims to determine and examine the stages of preparation, implementation, obstacles and the final results of the training that has been carried out by the trainer. The research method used is a qualitative method. The subjects in this evaluation study were the extracurricular trainers of elementary...

[+ Article details](#)

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

Proceedings Article

The Assignment Method Toward Improvement Results of Dribbling Learning in Football

Rudi, Muhamad Abdul Fitri

The purpose of this study is to determine the effect of applying the assignment method to improve dribbling learning outcomes in football games. This research used experimental method with a quantitative descriptive approach. The subjects in this study were Tara Depok Vocational high school students...

[+ Article details](#)

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

Proceedings Article

Analysis of Physical Conditions of Aerobic Endurance or VO2Max

Akhmad Amirudin, Said Abdillah

The purpose of this study was to determine the physical condition of aerobic endurance or VO2Max football players of JPOK FKIP ULM Banjarbaru. This research employed descriptive research. The samples for the study were 20 samples taken using total sampling techniques. This study used the MFT instrument...

[+ Article details](#)

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

Proceedings Article

The Effect of Physical Exercise toward the Memory Quality of Women

Ayla Maulida, Maruful Kahri, Tri Irianto

This research was intended to find out the quality and difference of the memory of women who actively exercise and the memory of women who not actively exercise. The research method employed was ex post facto method. The population of this research were 55 participants of two aerobic studios in Banjarbaru...

[+ Article details](#)

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

Proceedings Article

The Influence of Pull-Up and Push-Up Training on 50-Meter Chest Stroke Speed

Dwi Prasetyo Pambudi, Herita Warni, AR. Shadiqin

This study aims to determine the effect of pull up and push up exercises on the 50 meter breaststroke swimming speed of the STIKIP Paris Berantai student at Kotabaru Regency. The research method used is the pre-experiment design method. The population in this study were the STIKIP Paris Chain students...

[+ Article details](#)

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

Proceedings Article

The Effectiveness of the Setting of Volleyball Training Guide Model to Increase the Setting Skill

Khurotul Aini, Moch. Asmawi, Ramdan Pelana, Firmansyah Dlis, ME Winarno, James Tangkudung, Achmad Sofyan Hanif

Development of science and technology an important to improving of human resources, especially in the issue of education. The use of media in learning and training activities greatly helps the process of delivering material

effectively and efficiently. The use of appropriate media will help encouraging...



[+ Article details](#)

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

Proceedings Article

The Contribution of Pedagogical Competence and Motivation to Get Achievement of the Teachers of Physical Education, Health, and Sports

Fajriah, Maruful Kahri, Syamsul Arifin

The objectives of this study are to describe the contribution of pedagogical competence and motivation towards the working performance of the teachers of physical education, health, and sports in the Elementary Schools in The District of Kusan Hilir, The Regency of Tanah Bumbu. The research method used...

[+ Article details](#)

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

Proceedings Article

Effect of Fundamental Stage Training Program Based on LTAD Model Toward Basic Swimming Skills

Z. Arifin, Asep Angga Permadi, Riri Agustina Pratiwi

The purpose of the study is to find the effect of a fundamental stage training program on basic swimming skills. Pre-experimental design with one-group pretest-posttest design was employed as the research method. The population of this study was 20 students of TK IT Al-Wasilah who are 6 years old.

Meanwhile,...

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

Proceedings Article

The Effect of Interval Run Training on Increasing VO2 Max on Futsal Player

Ahmad Nohrizal, Maruful Kahri, Shadiqin

This study aims to determine the effect of interval running training on increasing VO2 Max on MAN Selat Tengah futsal Kapuas Regency. The research method used is the pre-experiment design method. The population in this study was the futsal player MAN Selat Tengah Kapuas Regency, who participated in futsal...

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

Proceedings Article

The Effect of Eye-Hand Coordination Training on Accuracy of Service in Volleyball Players

H. Ngadiyana

This study aims to determine the effect of eye-hand coordination exercises on the accuracy of top service for volleyball players. The research method used is the pre-experiment design method. The samples in this study were 24 volleyball players in SMA Negeri 1 Angsana, Tanah Bumbu Indonesia, which were...

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



Proceedings Article

Effect of Plyometric Training Front Cone Hops and Knee Tuck Jump on Improvement Muscle Explosion Power

Sulfiria Effendi, Sunarno Basuki, AR. Shadiqin

This research aims to know the influence of exercise of plyometric front cone hops and knee tuck jump towards to increase the explosive muscle power limbs (study on male students of extracurricular in SMAN 13 Banjarmasin. The research method was used is a method of pre-experiment design. The technique...

[+ Article details](#)

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

Proceedings Article

Improving the Learning Outcome of Passing Basic Motion by Using Side-Foot in the Football Game Through the Blocking Game Media

Tatang Iskandar

This study aims to improve the learning outcome of passing basic motion by using the side-foot in the football games through blocking game media. In the first cycle of the research, the percentage of students who were able to complete the passing learning outcome reached 70% or 28 students. This percentage...

[+ Article details](#)

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

Proceedings Article

Design of Cooperative Learning Models in Physical Education Learning in Elementary School

Muhammad Fitri, Tri Irianto, Rahmadi

The purpose of this study was to determine the contents of the steps of the Learning Implementation Plan using the cooperative model (Cooperative Learning) for elementary school students in the City of Banjarbaru. The research method used in this study is a quantitative method by using surveys and documentation...

[+ Article details](#)

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

Proceedings Article

The Effect of Interval Training on Running Speed of 40-Meter on Elementary Students' Running Performance

Suparlan, Syamsul Arifin, Maruful Kahri

The students of SDN Tebing Siring 3 have a low running performance, so the researcher concludes that the students of SDN Tebing Siring 3 do not good running speed. This research aims to determine the effect of interval training on the running speed of 40 meters of the students of SDN Tebing Siring 3...

[+ Article details](#)

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

Proceedings Article

The Effects of Addition of Physical Activity Beyond Physical Education Learning Toward the Level of Physical Fitness

Syamsuardi, Maruful Kahri, AR. Shadiqin

The purpose of this study was to determine the Effect of Addition of Physical

Activity 2 Times a Week Through Self-Assignment Outside of Physical education learning Against the Level of Physical Fitness in students of SI 3 Banjarmasin. The method used in this study is the Experimental method, namely...

[+ Article details](#)

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

Proceedings Article

The Correlation Between the Opponent's Error with the Team Victory of the Volleyball National Team on 2019 Peace Cup Participants

Tirto Apriyanto, Muhammad Ilham

This study aimed to determine the correlation between opponent's error with the team victory of the volleyball national team on 2019 Peace Cup participants. This research method used a survey method with correlational techniques, which was a study to collect data obtained from the results of the Peace...

[+ Article details](#)

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

Proceedings Article

The Effect of 3-Point 5-Post Shooting Drills Training on the 3-Point Shooting Success in Basketball Player

Taufik Hidayat, Tri Irianto, Sunarno Basuki

The basketball player of Junior High School 1 Banjarbaru has a 3-point shooting capability, which is still low. This study aims to determine the effect of 3-point 5-post shooting drills training on the success of 3-point shooting in basketball players of Junior High School 1 Banjarbaru. The research...

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

Proceedings Article

The Effect of Teaching and Learning of Castles and Rounders on the Improvement of Physical Fitness

Sucipto, Herita Warni, Syamsul Arifin

This research aims to determine the effect of teaching and learning of Castles and Rounders Game on Improvement of Physical Freshness. This research used is the Pre-Experimental design method. The research was conducted based on One-Group Pretest-Posttest Design, involving 47 students of the fifth-grade...

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

Proceedings Article

The Influence of Interval Run Training on Fitness Status in Students at State Elementary School

Supian Indera Jaya

This study aims to determine the effect of interval running training on the level of physical fitness in students of the Kaludan Kecil State Elementary School. The research method used is the pre-experiment design method. The population in this study were all students of SDN Kaludan Kecil, amounting...

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

Proceedings Article

An Evaluation of Physical Education in Elementary School Learning Education

Tauchid, Herita Warni, Maruful Kahri

Unit Level Curriculum (SBC) in which contains learning objectives should be achieved by educators, the operator of the curriculum. The implementation of learning activities consists of planning, implementation and assessment which are needed for school learning activities. It is necessary to find out...

[+ Article details](#)

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

Proceedings Article

Evaluation of Physical Education in Special Education Elementary School

Yusmawati, Taufik Rihatno, Heni Widyaningsih, Sri Nuraini

This research is about implementing standard learning processes for students in Special Education Elementary School. This study wanted to obtain data and information regarding the implementation of educational learning based on the standard learning process in Special Education Elementary School. Respondents...

[+ Article details](#)

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

Proceedings Article

Teaching Indonesian Language Courses with Insight Into Wetlands in the 4.0 Era

Ahsani Taqwiem

Bahasa course is one of the compulsory courses in the curriculum component

of the college. Mandatory means all levels and all scientific fields should present this course as a basic course. Entering the 4.0 era, challenges to the subject are more substantial. Besides completing the subject, this course...

[+ Article details](#)

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

Proceedings Article

The Practicality of Physics Teaching Materials Based on Local Wisdom in the Wetland Environment

Misbah, Mustika Wati

The background of this study is that there is no teaching materials that use local wisdom in wetland environment as the problem object in learning. The aim of this study is to describe the practicality of physics teaching materials based on local wisdom in the wetlands. This study is a research and development...

[+ Article details](#)

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

Proceedings Article

Blended Learning to Improve Learning Outcomes in Digital Electronics Courses

Dewi Dewantara, Mustika Wati, Misbah, Saiyidah Mahtari, Surya Haryandi

This article focuses to describe the effectiveness of blended learning in digital electronics courses. This research is descriptive analysis research. The subjects of this study were 48 students of physics education FKIP Lambung Mangkurat University. The effectiveness of the implementation of blended...

[+ Article details](#)

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



Proceedings Article

Science, Technology, Engineering, and Mathematics Education for Sustainable Energy in Wetland Environment

Eko Susilowati, Suyidno, T Mayasari, Zainuddin, Arif Sholahuddin, S Miriam,
N Winarno

Creativity is a competency that must be mastered by students based on 21st-century learning skill standards in accordance with the development of science and technology. This requires students to become active, creative and innovative human beings in responding to increasingly complex and diverse global...

[+ Article details](#)

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

Proceedings Article

The Development of Electronic Publication Module Integrated with Means-Ends Analysis Learning Model to Improve Students' Analytical Thinking Skill in Stoichiometry Materials

Rilia Iriani, Ike Norjanah, Muhammad Kusasi

Research on the development of integrated epub modules with means-ends analysis learning models on stoichiometry material aims to produce valid, practical, and effective epub modules. This development uses the ADDIE model. The epub-module trial that was developed was carried out on MAN 3 Banjarmasin...

[+ Article details](#)

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



Proceedings Article

The Heritage of Banjar Kingdom from the Perspective of Social Inclusion and Entrepreneurship Education

Taufik Arbain

The Banjar Sultanate's policy in the past could answer all the problems of its time even reaching its golden age. Sultan Suriansyah is a figure who upholds equality of rights, justice, and protection. It shows pluralism that respects the attitude of social inclusion in the human context and the entities...

[+ Article details](#)

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

Proceedings Article

The Practicality of Physics Teaching Materials Based on the Wetland Environment

Zainuddin, Misbah

Banjarmasin city environment is one of the environments with potential wetlands that can be used as a source of learning in the subject of fluid physics so that the development of teaching materials based on the wetland environment is deemed necessary to be developed. This study aims to describe the...

[+ Article details](#)

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

Proceedings Article

Agility and Balance on the Speed of Dribbling in Soccer

Dindin Abidin, Memet Muhamad, Aridhotul Haqiyah, Adhy Rahman Gusriadi

Agility and balance are important in the speed of dribbling in soccer for t student. The main of the research was to identify a level of quantitative changes of the dribbling speed with fifteen years old football players under the influence of the agility and balance. This research method is associative...

[+ Article details](#)

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

Proceedings Article

Sports and the Culture of East Nusa Tenggara Society

Ary Moelyadi

Society of East Nusa Tenggara (NTT) has a good socio-cultural condition. This can be seen from the good social situation as well as their good social behavior of the people. That combination creates a conducive socio-cultural condition. The culture as their characteristics differentiates them from other...

[+ Article details](#)

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

Proceedings Article

Physical Fitness of Students Based on the Nutrition Status of the Homeless Students

Eka Oktaviani, Sunaryo Soenarto, Reza PR Mohammad

This study aims to determine the level of physical fitness nutritional status of homeless children. The method used in this research is the descriptive method using measurement techniques and using a purposive sampling technique test. The population in this study were 40 students from Mawar 2 Special...

[+ Article details](#)

[Download Article \(PDF\)](#) 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 Social Science, Education and Humanities Research](#)

Proceedings of the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)

AUTHORS

162 authors

Abdillah, Said

Analysis of Physical Conditions of Aerobic Endurance or VO2Max

Abidin, Dindin

Agility and Balance on the Speed of Dribbling in Soccer

Aini, Khurotul

The Effectiveness of the Setting of Volleyball Training Guide Model to Increase the Setting Skill

Al Ardha, Muchamad Arif

Sport Entrepreneurs' Perspective on 4.0 Industrial Era

Alsaudi, Andi Taufan Bayu Dewantara

The Influence of Drill Exercise and Eye Coordination Foot Methods Toward the Smash Skill of Badminton

Aminah, Hj.

Effect of Physical Fitness Exercises in 2012 and New Indonesian Gymnastics Exercise (SRIBU) Exercises on Physical Fitness Level of Female Students

Amirudin, Akhmad

Analysis of Physical Conditions of Aerobic Endurance or VO2Max

Anggara, Norma

Implementation of Inquiry Learning Model to Improve Pencak silat Learning Outcomes

Anwar, Mathlaul

The Effect of Plyometric Knee Tuck Jump and Barrier Hops Training on Explosive Muscle Explosion Futsal Player

Apriyanto, Tirta

Decreased Level of Fatigue in Aerobic Sports in the Use of Vitamin C

Apriyanto, Tirta

The Correlation Between the Opponent's Error with the Team Victory of the Volleyball National Team on 2019 Peace Cup Participants

Arbain, Taufik

The Heritage of Banjar Kingdom from the Perspective of Social Inclusion and

Entrepreneurship Education



Arifin, Mochamad

Sport Entrepreneurs' Perspective on 4.0 Industrial Era

Arifin, Ramadhan

Problematic Education Physical Students in the Wetlands

Arifin, Ramadhan

The Effect of Zig-Zag Run Training on Increasing the Agility of Soccer Players

Arifin, Syamsul

Problematic Education Physical Students in the Wetlands

Arifin, Syamsul

The Effect of Push-Up Exercise with Wrist Flicking on the Ability of Three Point Shooting of BSWJ Club Basketball Players

Arifin, Syamsul

The Effect of Shadow 8 Training on Agility of Badminton Players Ages 12–15 Years

Arifin, Syamsul

The Effect of Plyometric Double Leg Speed Hop Exercise on Explosive Muscle of Volleyball Players

Arifin, Syamsul

The Contribution of Pedagogical Competence and Motivation to Get Achievement of the Teachers of Physical Education, Health, and Sports

Arifin, Syamsul

The Effect of Interval Training on Running Speed of 40-Meter on Elementary Students' Running Performance

Arifin, Syamsul

The Effect of Teaching and Learning of Castles and Rounders on the Improvement of Physical Fitness

Arifin, Z.

Effect of Fundamental Stage Training Program Based on LTAD Model Toward Basic Swimming Skills

Asmawi, Moch.

The Effectiveness of the Setting of Volleyball Training Guide Model to Increase the Setting Skill

Basuki, Sunarno

The Effect of Plyometric Knee Tuck Jump and Barrier Hops Training on Explosive Muscle Explosion Futsal Player

Basuki, Sunarno

An Evaluation of Extracurricular Coaches of Elementary School Sports Club

Basuki, Sunarno

Effect of Plyometric Training Front Cone Hops and Knee Tuck Jump on Improvement Muscle Explosion Power

Basuki, Sunarno

The Effect of 3-Point 5-Post Shooting Drills Training on the 3-Point Shooting Success in Basketball Player

Bujang

Physical Condition and Self-Control Improves the Ability of Back Attack in Volleyball

Destriana

Development of Overhand Serves Learning Techniques in Volleyball Game

Dewantara, Dewi

Blended Learning to Improve Learning Outcomes in Digital Electronics Courses

Dirgantoro, Edwin Wahyu

The Effect of Zig-Zag Run Training on Increasing the Agility of Soccer Players

Dirgantoro, Edwin Wahyu

The Effect of Three Corner Drill Training Against Futsal Playback Probability

Dlis, Firmansyah

Kindergarten Teachers' Perception on Basic Movement Skills Understanding Through Rhythmic Gymnastics Movement

Dlis, Firmansyah

The Effectiveness of the Setting of Volleyball Training Guide Model to Increase the Setting Skill

Effendi, Sulfiria

Effect of Plyometric Training Front Cone Hops and Knee Tuck Jump on Improver Muscle Explosion Power

Fadillah, Muhammad

The Effect of Three Corner Drill Training Against Futsal Playback Probability

Fajriah

The Contribution of Pedagogical Competence and Motivation to Get Achievement of the Teachers of Physical Education, Health, and Sports

Fakhruddin

The Effect of Knee Tuck Jump Plyometrics Training on Dollyo Chagi Athlete Taekwondo

Fardy, Muhammad Fajar

The Effect of Angle Hop and Squat Jump Exercise on Leg Power in Futsal

Fauzan, Lazuardy Akbar

The Difference of Backhand Drive Ability Using Internal Drive Method and Drive Crosscourt Method for Tennis Players

Fitri, Muhamad Abdul

The Assignment Method Toward Improvement Results of Dribbling Learning in Football

Fitri, Muhammad

Design of Cooperative Learning Models in Physical Education Learning in Elementary School

Friskawati, Gita Febria

Analyzing the Challenges to Using Technology in Physical Education

Gusriadi, Adhy Rahman

Agility and Balance on the Speed of Dribbling in Soccer

Hamid, Abd.

The Effect of Three Corner Drill Training Against Futsal Playback Probability

Hanif, Achmad Sofyan

The Effectiveness of the Setting of Volleyball Training Guide Model to Increase th
Setting Skill

Haqiyah, Aridhotul

Physical Condition and Self-Control Improves the Ability of Back Attack in Volleyball

Haqiyah, Aridhotul

Agility and Balance on the Speed of Dribbling in Soccer

Harvianto, Yudo

Strengthening the Brotherhood of Ethnic Groups Rope Through Sport

Haryandi, Surya

Blended Learning to Improve Learning Outcomes in Digital Electronics Courses

Hidayat, Taufik

The Effect of 3-Point 5-Post Shooting Drills Training on the 3-Point Shooting Success
in Basketball Player

Ilham, Muhammad

The Correlation Between the Opponent's Error with the Team Victory of the Volleyball
National Team on 2019 Peace Cup Participants

Indah, Eka Purnama

Improving Learning Outcomes of Motion Short Distance Run with the Basic Approach
to Play

Iriani, Rilia

The Development of Electronic Publication Module Integrated with Means-Ends
Analysis Learning Model to Improve Students' Analytical Thinking Skill in
Stoichiometry Materials

Irianto, Tri

The Effect of Knee Tuck Jump Plyometrics Training on Dollyo Chagi Athlete
Taekwondo

Irianto, Tri

The Effect of Plyometric Knee Tuck Jump and Barrier Hops Training on Explosive
Muscle Explosion Futsal Player

Irianto, Tri

Training Using Wrist Forearm Modification Tool**Irianto, Tri**

An Evaluation of Extracurricular Coaches of Elementary School Sports Club

Irianto, Tri

The Effect of Physical Exercise toward the Memory Quality of Women

Irianto, Tri

Design of Cooperative Learning Models in Physical Education Learning in Elementary School

Irianto, Tri

The Effect of 3-Point 5-Post Shooting Drills Training on the 3-Point Shooting Success in Basketball Player

Iskandar, Tatang

Improving the Learning Outcome of Passing Basic Motion by Using Side-Foot in the Football Game Through the Blocking Game Media

Jaya, Supian Indera

The Influence of Interval Run Training on Fitness Status in Students at State Elementary School

Junaidi

Decreased Level of Fatigue in Aerobic Sports in the Use of Vitamin C

Kahri, Maruful

Effect of Physical Fitness Exercises in 2012 and New Indonesian Gymnastics Exercise (SRIBU) Exercises on Physical Fitness Level of Female Students

Kahri, Maruful

The Effect of Physical Exercise toward the Memory Quality of Women

Kahri, Maruful

The Contribution of Pedagogical Competence and Motivation to Get Achievement of the Teachers of Physical Education, Health, and Sports

Kahri, Maruful

The Effect of Interval Run Training on Increasing VO2 Max on Futsal Player

Kahri, Maruful

The Effect of Interval Training on Running Speed of 40-Meter on Elementary Student
Running Performance

Kahri, Maruful

The Effects of Addition of Physical Activity Beyond Physical Education Learning
Toward the Level of Physical Fitness

Kahri, Maruful

An Evaluation of Physical Education in Elementary School Learning Education

Kahri, Ma'ruful

Training Using Wrist Forearm Modification Tool

Karisman, Vicki Ahmad

Analyzing the Challenges to Using Technology in Physical Education

Khory, Fifuka D.

Cognitive Bias in a Disruptive Era: How Thinking Patterns Affects Academic
Performance and Health

Kristiyanto, Agus

Instruction of Women Goalkeepers' in Indonesian Futsal Nusantara League 2019

Kusaini, H.M

The Effect of Three Corner Drill Training Against Futsal Playback Probability

Kusasi, Muhammad

The Development of Electronic Publication Module Integrated with Means-Ends
Analysis Learning Model to Improve Students' Analytical Thinking Skill in
Stoichiometry Materials

Mahtari, Saiyidah

Blended Learning to Improve Learning Outcomes in Digital Electronics Courses

Maksum, Ali

Cognitive Bias in a Disruptive Era: How Thinking Patterns Affects Academic
Performance and Health

Mashud

The Learning Effectiveness of Basic Throwing Movement Through Playing Approach

Maulana, Anmad

The Effect of Push-Up Exercise with Wrist Flicking on the Ability of Three Point Shooting of BSWJ Club Basketball Players

**Maulida, Ayla**

The Effect of Physical Exercise toward the Memory Quality of Women

Mayasari, T

Science, Technology, Engineering, and Mathematics Education for Sustainable Energy in Wetland Environment

Miriam, S

Science, Technology, Engineering, and Mathematics Education for Sustainable Energy in Wetland Environment

Misbah

The Practicality of Physics Teaching Materials Based on Local Wisdom in the Wetland Environment

Misbah

Blended Learning to Improve Learning Outcomes in Digital Electronics Courses

Misbah

The Practicality of Physics Teaching Materials Based on the Wetland Environment

Moelyadi, Ary

Sports and the Culture of East Nusa Tenggara Society

Mohammad, Reza PR

Physical Fitness of Students Based on the Nutrition Status of the Homeless Students

Muhamad, Memet

Agility and Balance on the Speed of Dribbling in Soccer

Mulya, Gumilar

The Effect of Zig-Zag Run Training on Increasing the Agility of Soccer Players

Muslim, Budi Ariyanto

Evaluation Program of Student League Competition U-12 Menpora Cup 2017

Ngadiyana, H.

The Effect of Eye-Hand Coordination Training on Accuracy of Service in Volleyball

Players

Nohrizal, Ahmad

The Effect of Interval Run Training on Increasing VO2 Max on Futsal Player

Norjanah, Ike

The Development of Electronic Publication Module Integrated with Means-Ends Analysis Learning Model to Improve Students' Analytical Thinking Skill in

Atlantis Press
Stoichiometry Materials

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.

A Study on the Quality of South Kalimantan Athletes on National Student Sports Week-2019

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

Oktaviani, Eka

Physical Fitness of Students Based on the Nutrition Status of the Homeless Students

▶ PROCEEDINGS

▶ ABOUT

Pambudi, Dwi Prasetyo

▶ JOURNALS

▶ NEWS

The Influence of Pull-Up and Push-Up Training on 50-Meter Chest Switch Speed

▶ BOOKS

▶ CONTACT

▶ POLICIES

▶ SEARCH

▶ MANAGE COOKIES/DO NOT SELL MY

INFO

1

2

>

[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 Social Science, Education and Humanities Research](#)

Proceedings of the 1st South Borneo International Conference on Sport Science and Education (SBICSSE 2019)

ORGANIZERS

CONFERENCE CHAIR

Dr. Herita Warni, M.Pd

Department Sport Education and Health, Faculty of Teacher Training and Education, Lambung Mangkurat University, Indonesia

ADVISORY BOARD

Prof. Dr. Djoko Pekik Irianto, M.Kes.

Universitas Negeri Yogyakarta, Indonesia

Prof. Dr. Tandiyo Rahayu, M.Pd

Universitas Negeri Semarang, Indonesia

Prof. Dr. M.E. Winarno, M.Pd

Universitas Negeri Malang, Indonesia

Prof. Dr. H. Rusli Lutan

Asian Society for Physical Education and Sport (ASPES), Indonesia

Prof. Dr. Bart Crum

Vrije Universiteit Amsterdam, Netherlands

Dr. Joseph J. Scott

Edith Cowan University, Australia

Prof. Dr. H. Adang Suherman, MA.

Universitas Pendidikan Indonesia Bandung, Indonesia

STEERING COMMITTEE

Prof. Chang Keun Kim

Korea National University, South Korea

Prof. Dr. Agus Kristiyanto, M.Pd

Universitas Sebelas Maret Solo, Indonesia

Dr. Agus Mahendra, M.A,

Universitas Pendidikan Indonesia Bandung, Indonesia

Prof. Dr. H. Syahrial Bakhtiar, M. Pd

Universitas Negeri Padang, Indonesia

Dr. dr. B.M. Wara Kushartanti, MS

Universitas Negeri Yogyakarta, Indonesia

ORGANIZING COMMITTEE



Dr. Hj. Atiek Winarti, M.Pd, M.Sc.

Lambung Mangkurat University, Indonesia

Dr. Tri Irianto, M.Kes

Lambung Mangkurat University, Indonesia

Dr. Hj. Noor Eka Chandra, M.Pd

Lambung Mangkurat University, Indonesia

Dr. Mariful Kahri, M.Pd

Lambung Mangkurat University, Indonesia

Prof. Dr. Fatchul Mu'in, M.Hum

Lambung Mangkurat University, Indonesia

Dr. Nanik Mariani, M.Pd

Lambung Mangkurat University, Indonesia

Dr. H. Syamsul Arifin, M.Pd

Lambung Mangkurat University, Indonesia

Drs. H. Sarmidi, M.Kes

Lambung Mangkurat University, Indonesia

Dr. Mashud, S.Pd., M.Pd

Lambung Mangkurat University, Indonesia



Dr. Deasy Arisanty, S.Si., M.Sc

Lambung Mangkurat University, Indonesia

Misbah, M.Pd

Lambung Mangkurat University, Indonesia

Dr. Mustika Wati, M.Pd

Lambung Mangkurat University, Indonesia

Dr. Rahmadi, M.Pd

Lambung Mangkurat University, Indonesia

Dewi Dewantara, M.Pd

Lambung Mangkurat University, Indonesia

Almubarak, M.Pd

Lambung Mangkurat University, Indonesia

Taufiq Hidayanto, M.Pd

Lambung Mangkurat University, Indonesia

Yusuf AlArief, M.Hum

Lambung Mangkurat University, Indonesia

Nasrullah, M.Pd. B.I

Lambung Mangkurat University, Indonesia

Raisa Fadilla, M. Pd

Lambung Mangkurat University, Indonesia

Rizky Amelia, M.Pd

Lambung Mangkurat University, Indonesia

Ramadhan Arifin, S.Pd., M.Pd

Lambung Mangkurat University, Indonesia

Mita Erliana, S.Pd, M.Or

Lambung Mangkurat University, Indonesia

Aryadi Rachman, S.Pd., M.Pd

Lambung Mangkurat University, Indonesia

Akhmad Amirudin, S.Pd., M.Pd

Lambung Mangkurat University, Indonesia

Norma Anggara, S.Pd., M.Pd

Lambung Mangkurat University, Indonesia

Lazuady Akbar Fauzan, S.Pd., M.Pd

Lambung Mangkurat University, Indonesia

Maulana Khalid Riefani, M.Sc, M.Pd

Lambung Mangkurat University, Indonesia

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

Cognitive Bias in a Disruptive Era: How Thinking Patterns Affects Academic Performance and Health

Ali Maksum and Fifuka D. Khory

*Sports Science Faculty
Universitas Negeri Surabaya
Surabaya, Indonesia
alimaksum@unesa.ac.id*

Abstract—In a disruptive era marked by rapid changes and an abundance of information, the occurrence of cognitive biases becomes difficult to avoid. Individuals are more confident in something perceived than the facts and actual data. Emotions are stronger than reason. In a neuropsychological perspective, people tend to use the limbic system rather than the neocortex in thinking and responding to things. As a result, opportunities for mistakes in making decisions more often occur. In the long run, such conditions will distort the academic climate that promotes rationality and critical thinking. The results of a study of 1000 students of Universitas Negeri Surabaya (Unesa) in seven faculties and postgraduate programs showed that cognitive bias occurred in 81% of respondents. Deprivation is deeper in social science students than exact science students. Other relevant research also shows that students who use intuitive thinking patterns have lower academic performance compared to students who use reflective thinking patterns. Intuitive thinking patterns also encourage students to cheat, and their eating patterns are very risky for health.

Keywords: *academic performance, cognitive bias, health, thinking patterns*

I. INTRODUCTION

In the field of psychology, a cognitive bias is not new. Studies on this matter have been around since 1979 when Amos Tversky and Daniel Kahneman wrote an article about their research entitled "Prospect theory: An analysis of decision under risk". This issue became a public concern after Kahneman won the Nobel Prize in economics in 2002. According to references [1], as he described in his book: *Thinking, fast and slow*, said that humans generally experience bias in providing judgment and making decisions. Today, the problem of cognitive bias becomes urgent to be studied as the strengthening of populism culture and hegemony of social media which have a big influence on life. In a disruptive era characterized by rapid change and abundance of information, the occurrence of cognitive biases becomes something that is difficult to avoid. Cognitive bias is a fallacy in thinking that affects individuals in making judgments and inferences. Mistakes in thinking can result in mistakes in acting. Cognitive biases can occur due to the inability of individuals to process information, excessive emotions, personal interests, or pressure from outside themselves.

In such conditions, people no longer think clearly and critically about the truth. They tend to accept truth based on their emotions and beliefs rather than on facts. The truth seems not determined by data and facts, but by individual and group perceptions and beliefs. Reference [2] calls it the

death of expertise. When there are facts that are in line with their beliefs, they are convinced of the truth of the facts without verifying. The abundance of information that is often called "big data" is apparently not linear with the individual's ability to act and make decisions. What emerges is precisely the epidemic of irrationality, which is characterized by the loss of rational thought and a lack of awareness of the importance of the verification process before concluding. People become rushed, spontaneous, instant, and always driven to be the fastest without thinking of the underlying truth.

If the individual is accustomed to using intuitive thinking models, then, in the long run, his mind will not function properly. Critical thinking habits become undeveloped. As a result, individuals lose the reference to understanding problems clearly, including solving problems in life. This situation is not only unfavourable but also counterproductive to progress. It must be admitted that our educational process cannot produce higher-order thinking skills. In competitions that test critical thinking skills and ability to overcome problems such as PISA (a program for international student assessment) and TIMSS (trends in international mathematics and science study), the reasoning power of Indonesian children is very low. In PISA, for example, of the 65 countries that were assessed, Indonesia ranked 64th. While Malaysia ranked 52nd, Thailand ranked 50th, Singapore ranked 2nd, and China ranked 1st [3]. In the 2015 TIMSS, for mathematics, Indonesia was ranked 45 out of 50 countries surveyed. While in the field of science, Indonesia's ranking is in 45 out of 48 countries [4].

In many studies, thinking models are closely related to the curiosity of new information and experiences [5], including creative thinking and problem solving [6-7]. Thinking patterns are also related to academic processes and performance [8-11], namely how students respond to any information on existing learning resources. Learning is not just meant as an effort to get academic value as measured by the GPA, but rather as an effort to build a civilization that educates the nation's life as the spirit of Law No. 12 of 2012. Thinking also influences one's lifestyle and health [12-13]. Health problems suffered by a person can be traced from the mindset they have, including in responding to the food around them.

A. Neuro-Psychological Perspective

The study of thinking and acting on human beings has long been a concern of humanities scientists, especially psychology and sociology. But later, it became interesting because of the involvement of neuroscience in the discourse. Neuroscience has developed rapidly in the past twenty years

as scientists have a strong curiosity to unravel the mysteries of the human brain that is so complex, both in structure and in the way it works. In terms of neuropsychology, scientists have concluded that the brain is the centre of command and control of human behaviour. They also discovered the fact that the behaviour displayed by humans turned out to have a neuro basis in brain structure [12], [14-15]. Referring to the concept of a triune, the brain structure consists of three parts, namely the brain stem (reptilian brain), limbic system (mammalian brain), and neocortex (human brain). The brain stem area, including the cerebellum, is responsible for things that are instinctive survival, such as breathing, hunger, thirst, sex, and fight or flight response. The limbic system area, including the amygdala, hypothalamus, thalamus, basal ganglia, and lateral temporal cortex, is responsible for emotions such as pleasure, sadness, joy, jealousy, fear, and anger. As for the neocortex area, including the anterior cingulate cortex, prefrontal cortex, medial temporal, and hippocampus, it is responsible for matters related to intellectual, reasoning, thinking, control, morals, and consciousness. Thus, there is a close relationship between the brain and someone's behaviour. The relationship between the two is reciprocal, and the brain affects behaviour and vice versa behaviour can affect the physical form of the brain in accordance with the principle of neuroplasticity. Individuals who in their activities use a lot of brain stem and limbic system areas, then the neocortex area will be weakened. Physical changes and brain activity will be seen if laboratory analyzes such as MRI (magnetic resonance imaging) and EEG (electroencephalograms) are carried out, while behavioural changes can be observed through observation, tests and other forms of measurement. Differences in Characteristic and Mechanism between System 1 and System 2

System 1	System 2
Based on the limbic system (amygdala, hypothalamus, basal ganglia)	Based on neocortex (anterior cingulate cortex, prefrontal cortex, hippocampus)
Evolutionarily old	Evolutionarily recent
Shared with animal	Uniquely human
Default mechanism	Custom mechanism
Intuitive	Analytic
Aggression	Moral
Unconscious	Conscious
Automatic	Controlled
Perception	Fact, data
Low effort, comfort zone	High effort, change
Holistic	Analytic
Pragmatic	Logical
Stereotypical	Egalitarian

Based on dual-processing theory [1], [16], the thought process has two mechanisms, namely system 1 that operates on the limbic system and system 2 that operates on the neocortex (see table 1). System 1 is the default mechanism in the brain. Every incoming stimulus will be responded to first by the limbic system, which is the place of emotion. System 1 is characterized by a decision-making process that is emotional, intuitive, automatic, lacks in-depth consideration, and is difficult to control over instinctive desires. Meanwhile, system 2 is a custom mechanism in the brain. It only functions when activated and managed. System 2 is characterized by rational decision making, requires in-depth consideration, is relatively flexible, and is adaptive to rules.

Both systems exist in the human mind and interact with each other. There is a strong association between the neocortex and the limbic system, between reason and emotion. When reason strengthens, emotion will weaken, and when emotions strengthen, reason will weaken. The function of reason is inversely proportional to emotions. The neocortex area in the brain structure needs to be optimized and reasoning activated. At the same time, the limbic system needs to be managed and self-control strengthened. Attitudes and actions that predominantly exploit the limbic system will make the neocortex become atrophy, the reasoning is not functioning optimally, and in turn, will reduce the degree of humanity. This theory is likely to explain the mental phenomena and deviant behaviour of some people lately. Deviant behaviour often occurs because individuals have no other alternative due to limitations in mind. Students who cheat can be due to lack of answers in their minds, students/lecturers who are plagiarism can be due to lack of skills in writing ideas in writing, corrupt people can be due to lack of thoughts to gain wealth the right way, and even people who are disappointed or hurt then committing acts of violence, including killing, is very likely due to the lack of alternatives in his mind to solve problems constructively.

II. METHODOLOGY

Samples of our study consisted of 1000 Universitas Negeri Surabaya (Surabaya State University) students, consisting of 324 men and 676 women. Descriptive statistics were used in this study to understand the academic performance of students based on self-control ability. The analysis of data was used T-test to understand the differences among scores of math, the score of Indonesian and score of religion.

III. RESULTS AND DISCUSSION

A. Thinking Patterns and Academic Performance

The results of our study of 1000 Universitas Negeri Surabaya (Surabaya State University) students, consisting of 324 men and 676 women, showed that 81% of students used intuitive thinking patterns and 19% used reflective thinking [17]. These findings also confirm that the default mechanism in the brain is to think intuitively and will respond to stimuli based on emotions unless they are activating their reasoning. The low level of thinking and the low quality of education is also due to these factors. From a gender aspect, women are more dominant using intuitive thinking patterns than men. This finding also confirms the statement that women tend to use emotions rather than their thoughts.

Many students who use intuitive thinking patterns show that they are not able to control emotional impulses in themselves. Mechanically, the stimulus that enters the brain will be responded to first by the limbic system in which emotions reside. If the information process only stops at the limbic system, then there will be no analysis and evaluation of that information, considering that rational considerations only occur in the neocortex. As a result, the performance of the mind will not be maximized.

Testing the relationship model between variables by using structural equation modelling shows that thinking patterns affect curiosity, and curiosity wants to influence academic performance [17]. Of the five aspects of mindset, three aspects including the seriousness of effort, evaluation,

and response significantly influence academic performance. Meanwhile, two other aspects, namely tempo and results, did not significantly influence academic performance. Reflective thinking patterns, which require serious and evaluative thinking efforts, have a positive impact on students' needs for information, raise challenges, and are creative in solving problems. Thinking skills and curiosity are important factors in building a creative and innovative culture that impacts the nation's competitiveness. Referring to the results of previous studies that there are two things that are still a problem of the quality of education until now, namely critical thinking and problem-solving. Critical thinking is the ability to analyze and evaluate something based on relevant logic, information and data. While problem-solving is the ability to find the right solution to a problem. Both are important parts of 21st-century skills. A country that dreams of competitiveness needs to pay serious attention to both.

TABLE I. ACADEMIC PERFORMANCE OF STUDENTS BASED ON SELF-CONTROL ABILITY

	Self-control	N	Mean	SD	SEM
Score of Math	Low	250	79.78	8.593	.543
	High	455	82.11	7.210	.338
Score of Indonesian	Low	250	81.96	6.117	.387
	High	455	84.42	5.939	.278
Score of Religion	Low	250	83.32	7.827	.495
	High	455	84.97	5.946	.279

TABLE II. ACADEMIC PERFORMANCE OF STUDENTS BASED ON SELF-CONTROL ABILITY

		Levene's Test for Equality of Variances		T-test for equality of means				
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference
Score of Math	Equal variances assumed	.332	.565	-3.837	703	.000	-2.334	.608
	Equal variances not assumed			-3.647	442.561	.000	-2.334	.640
Score of Indonesian	Equal variances assumed	.287	.592	-5.197	703	.000	-2.456	.473
	Equal variances not assumed			-5.152	500.171	.000	-2.456	.477
Score of Religion	Equal variances assumed	7.031	.008	-3.135	703	.002	-1.647	.525
	Equal variances not assumed			-2.899	409.385	.004	-1.647	.568

In addition to optimizing the function of reason, the next task is to control emotions that reside in the limbic system. Related to this problem, I would like to explain the results of research conducted on 705 elementary and junior high school students in Surabaya. The research modified the classic experiment conducted by Walter Mischel on a group of children given Marshmello [18]. The elementary and middle school students were asked, if you are given delicious chocolate, do you immediately eat it or save it first? Among

them, 35% answered directly eaten, and 65% answered saved first. The students were further explored in relation to academic achievement at school as measured by mathematics, Indonesian, and religion. The results of the study prove that children who can control themselves show better learning achievement compared to children who cannot control themselves (see table 2).

B. Thinking Patterns, Lifestyle, and Health

Thinking patterns affect not only academic performance but also lifestyle including health. Individuals who can use their minds well will avoid things that can interfere with their health. In the case of eating, for example, an individual who activates neocortex will consider the type of food he consumes. As a massive culinary promotion followed by the ease of getting it through a smartphone application makes it difficult for people not to be tempted. Our survey of 705 students in Surabaya showed that 87.9% of students had smartphones, of which 76.2% liked using video games. A large number of smartphone users is certainly a potential target market. The results of the study also mentioned that students who liked to eat fried foods amounted to 64.7%, liked food /sweet drinks by 88.6%, and liked to eat / drink in packages by 73.9%. The results of statistical analysis prove that students who like to eat out and don't like to eat vegetables are more likely to face health problems than students who don't like to eat out and like to eat vegetables.

Lifestyle problems must be a serious concern because of their impact on the quality of human resources going forward. Reference [19] through its report in 2018 stated that non-communicable diseases would continue to be of global concern through the SDGs program as global commitments are weak, both in the form of legislation, budgeting, and implementation? In 2014, WHO conducted a global survey and lowered the profile report of each country related to non-communicable diseases. In the case of Indonesia, WHO noted that non-infectious diseases - such as heart disease, stroke, acute breathing, and diabetes mellitus - caused death by 71%. It seems that there has been a significant increase from year to year. In 1995, the death rate due to non-communicable diseases was 41.7%, in 2001 it was 49.9%, and in 2007 it was 59.5%. The results of the one-year evaluation of the implementation of the national health insurance (BPJS) show that the number of sick Indonesian population reaches 65%, far exceeding the normal standard of 10-15% of the total population [20]. Participant fees received by the BPJS Health cannot cover the budget that must be spent to pay for the sick, so they tend to continue to lose money. Data for 2017 shows that health BPJS has a deficit of 9 trillion [21]. and at the end of 2019, it is estimated to have a deficit of 28 trillion [22]. The biggest portion of the budget is spent to pay for non-infectious diseases, such as heart, kidney, diabetes, and stroke. This disease is generally caused by unhealthy lifestyles, including due to lack of movement.

The conditions as described above, basically correlate with the level of fitness of students. National data shows that over time, student fitness levels continue to decline [23]. In 1995, the fitness level of students which was categorized as good was 16.9%, in 2005 it became 5.6%, and in 2011 it fell again to 4%. While physical fitness was categorized as very poor, in 1995 it was 5.9%, in 2005 it became 10.71%, and in 2011 it rose significantly to 60%. Such conditions are certainly very alarming.

IV. CONCLUSION

Thinking patterns become crucial as change continues. We cannot control the changes that are and will continue to occur, which directly or indirectly, will affect our lives. What can be done is to manage the mind to respond accordingly. Intuitive thinking which is the default mechanism in the brain has dominated most individuals and influenced life, including academic performance and health. Therefore, emotions that reside in the limbic system must be controlled. Furthermore, we continue to promote reflective thinking, activating reasoning in the neocortex, which seeks to analyze and evaluate each stimulus, in order to obtain optimal academic and health performance.

REFERENCES

- [1] D. Kahneman, *Thinking fast and slow*. New York: Penguin Group, 2011
- [2] T. Nichols, *The death of expertise: The Campaign against established knowledge and why it matters*. New York: Oxford University Press, 2017.
- [3] OECD, *PISA 2012 Results in Focus: What 15-year-olds know and what they can do with what they know*, 2013.
- [4] TIMSS and PIRLS, *TIMSS 2015 international results*. Boston: International Study Center, 2015
- [5] R. Ligneul, M. Mermillod, and T. Morisseau, "From relief to surprise: Dual control of epistemic curiosity in the human brain" *NeuroImage*, Volume 181, pp 490-500, 2018.
- [6] L. P. Hagtvedt, K. Dossinger, S. H. Harrison, and L. Huang, Curiosity made the cat more creative: Specific curiosity as a driver of creativity. *Organizational Behavior and Human Decision Processes*, Volume 150, Pages 1-13, 2019
- [7] J. H. Hardy, A. M. Ness, J. Mecca, Outside the box: Epistemic curiosity as a predictor of creative problem solving and creative performance. *Personality and Individual Differences*, Volume 104, Pages 230-237, 2017
- [8] N. Wulandari, K. A. Widayati, and B. Suryobroto, "Cognitive style and creativity quality: Influence on achievement of university students in Indonesia". *Hayati Journal of Biosciences*, vol. 23, p. 121-124, Elsevier B.V. 2016.
- [9] I. V. Grebenev, L. B. Lozovskaya, and E. O. Morozova, "Methodology of determining student's cognitive styles and its application for teaching physics" *Springer Open Journal*, vol 3, p 449, 2014.
- [10] A. Diseth, and O. Martinsen, "Approach to learning, cognitive style, and motives as predictors of academic achievement". *Educational Psychology UK*, vol. 23, p. 195-207, 2013.
- [11] L. F. Zhang, "Thinking styles: Their relationship with modes of thinking and academic performance". *Educational Psychology UK*, vo. 22, p 331-348, 2002
- [12] D. Chopra, and R. E. Tanzi, *Super brain: Unleashing the explosive power of your mind to maximize health, happiness, and spiritual well-being*. New York: Three Rivers Press, 2012.
- [13] D. G. Amen, *Change your brain change your body: Use your brain to get and keep the body you have always wanted*. New York: Crown Publishing, 2010.
- [14] R. Kurzweil, *How to create a mind: The secret of human thought revealed*. New York: Penguin Books, 2013.
- [15] S. Peters, *The chimp paradox: The mind management*. London: Ebury Publishing, 2012.
- [16] J. S. B. T. Evans, Dual processing accounts of reasoning, judgment, and social cognition. *The Annual Review of Psychology*, 2008.
- [17] A. Maksum, and F. D. Khory, Model hubungan struktural pola berpikir, hasrat ingin tahu, dan performa akademik. Laporan penelitian. Surabaya: LPPM Unesa, 2019.
- [18] W. Mischel, *The marshmallow test: Mastering self-control*. New York: Little, Brown & Company, 2014.
- [19] WHO (2018)? Time to deliver: Report of the WHO independent high-level commission on noncommunicable diseases. Geneva: WHO Press.
- [20] A. Noviani, Menkes: 65% penduduk sakit, klaim BPJS membengkak. *Bisnis.com*, 2015.
- [21] E. A. Retaduari, Atasi defisit Rp 9 T, BPJS kesehatan ajukan skema cost sharing 8 penyakit. *Detikfinance.com*, 2017.
- [22] B. Raharjo. BPJS diperkirakan rugi 28 triliun. *Republika.co.id*, 2019.
- [23] A. Maksum, Olahraga bermutu untuk semua. Makalah disampaikan dalam Pekan Ilmiah Keolahragaan Pascasarjana Unesa Surabaya, 17-20 September 2018 di Kampus Ketintang Surabaya, 2018.