

# PROCEEDINGS

## 2<sup>ND</sup> YOGYAKARTA INTERNATIONAL SEMINAR ON HEALTH, PHYSICAL EDUCATION, AND SPORT SCIENCE (2<sup>ND</sup> YISHPESS)

*"Community Building and Development through Physical Education and Sports"*

*In conjunction with*

## 1<sup>ST</sup> CONFERENCE ON INTERDISCIPLINARY APPROACH IN SPORTS (1<sup>ST</sup> COIS)

*"Integrating sports science intervention to optimize human performance"*



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# YISHPESS CoIS 2018



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## **2<sup>nd</sup> Yogyakarta International Seminar on Health, Physical Education, and Sport Science (YISHPESS 2018)**

## **1<sup>st</sup> Conference on Interdisciplinary Approach in Sports (CoIS 2018)**

October 26-27, 2018,  
Yogyakarta, Indonesia

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# Preface

First of all, please allow us to extend our warmest greetings and welcome to you all to the 2<sup>nd</sup> Yogyakarta International Seminar on Health, Physical Education, and Sports Science (YISHPESS 2018). The conference is held in conjunction with The 1<sup>st</sup> Conference on Interdisciplinary Approach in Sports (CoIS) by the Faculty of Sport Sciences Universitas Negeri Yogyakarta in Yogyakarta, Indonesia on October 26-27, 2018.

The community building and development require integrated aspects in physical education and sports. These issues should be solved by researchers, lecturers, students and even practitioners to share and present their current research. The purposes of the conference are to share and present the reflection and research results related to Physical Education, Health, and Sports Science. In another issue, interdisciplinary approach has been defined as cross disciplines with an in-depth knowledge in one aspect working together to solve problems. Interdisciplinary approach in sports is very important to gain optional result of performance. In line with the first goal of this conference, it seeks better understanding both in theoretical and practical situation in every expert's aspects.

With the YISHPESS's conference theme: "Community Building and Development through Physical Education and Sports" and CoIS's theme: "Integrating Sports Science Intervention to Optimize Human Performance", approximately 236 papers have been submitted at this conference but only 169 of these have been accepted for the presentation after a blind peer review process. We do hope that this conferences proceeding can enrich our understanding of the role of physical education, sports, and health in maintaining community building and development as well as become a meeting point for academics, sport practitioners and sports professional to share ideas and knowledge for improving performance in sports.

We would like to thank to all parties who helped running this program. Hopefully, all the time and efforts we have spent for these two conferences may be beneficial and impactful for the future.

Yogyakarta, October 20, 2018  
Organizing Committee

# Committee Report

Dear Excellences, Rector of Universitas Negeri Yogyakarta, invited speakers, distinguished guests, and ladies and gentlemen.

It is our pleasure to welcome you to the 2<sup>nd</sup> Yogyakarta International Seminar on Health, Physical Education, and Sports Science (YISHPESS 2018) and the 1<sup>st</sup> Conference on Interdisciplinary Approach in Sports (CoIS) held by Faculty of Sport Sciences, Universitas Negeri Yogyakarta. We would like to welcome all invited speakers from overseas who come from different countries to share their knowledge and ideas at this international conference.

We organize two conferences with the theme: “Community Building and Development through Physical Education and Sports” and “Integrating Sports Science Intervention to Optimize Human Performance”. These events reflect the role of sport science and physical education for developing human performance at this century.

Active participation from 11 invited speakers and 158 presenters reflect the important role of lecturers, students, researchers, and related background in sport and physical education. They will be organized into several panel and parallel sessions to facilitate main presentations and discussions. Moreover, all selected papers will be published in the international indexed proceeding.

We wish you enjoy these conferences and have a memorable time at Universitas Negeri Yogyakarta. Have a great day in Yogyakarta!

Organizing Committee

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# Analysis for the Development of a Physical Education Learning Model for Children with Special Needs

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**Abstract**—despite the implementation of the newest curriculum recommended by the government, physical education (PE) teachers at special schools still encounter difficulties in the effective and efficient management of the instructional process. This is due to the students' heterogeneity and their low level of physical fitness. Thus, it is quintessential to investigate the need level of PE teachers. This research aimed to investigate the need level of educational subjects, namely teachers and students, towards the development of a PE learning model for physical fitness. A descriptive research method (which involved the use of direct observation and questionnaire) was used to elucidate the findings generated in this study. The participants included 34 PE teachers and 60 students at a special school. The data were analyzed using descriptive percentage. The results showed that 87% of the students agreed to the development of a learning model. This finding was strengthened by the 100% agreement of the PE teachers on the learning model, which can improve students' activity during PE instructional process. Therefore, the need level of PE teachers and students at a special school in Yogyakarta, towards the development of a PE learning model on physical fitness is very high.

**Keywords**—need, physical education learning model, physical fitness

## I. INTRODUCTION

The advancement in technology and globalization has impacted the education system in different parts of the world. This era has forced the government to develop some aspects of education in Indonesia, these include the development of instructional processes, assessment models, facilities and infrastructure.

The Indonesian government, through the Regulation of the Minister of Education and Culture, No. 22 of 2016, explains the need to develop the instructional process and learning model that enable students to be active, creative, and innovative in order to provide a meaningful learning experience. In addition, there is a need for curriculum reformation at each level of education. The impact of this

reformation is a major issue of concern to educational practitioners, especially teachers and students. Physical education (PE) is a subject that demands students to be active, creative, and innovative in solving the problems encountered during physical activities. It also requires the teachers to be creative and innovative in the development of an effective learning model in a special school. In the Yogyakarta Special Region, the newest PE curriculum proposed by the government has been implemented. However, the difficulties associated with the management of efficient and effective instructions remained a major issue. It is therefore important to investigate the need level for the development of an effective PE learning model on physical fitness subject-matter in a special school.

One of the important goals of physical education is to systematically and continually improve active lifestyle, in order to maintain the physical fitness of students [1] at a special school. Physical fitness can be described as a series of characteristics associated with health or skills related to the efficient performance of physical exercises or daily activities [2]. The fitness components related to health include cardiorespiratory fitness, muscular fitness, flexibility, and body composition [3], while the components related to physical skills include agility, balance, coordination, power, time reaction, and speed [4].

Physical education model or design with game-based physical activities that are well-structured and applied continually can improve physical fitness (including health-related fitness and skill-related fitness) in individuals [5]. The use of a project-based learning (PBL) model increases the students' knowledge of health-related fitness (HRF) [6,7]. Based on the data collected through direct observation and interviews with some teachers at special schools, it can be inferred that there is a need to change the mindset about teaching strategies. Most teachers still encounter difficulties in changing the habit of using demonstration or providing examples on certain moves that need to be performed by students during physical activities. They need to explore the

new habit of giving the students stimuli to solve the problems encountered while performing certain physical activities, as suggested by the Regulation of the Minister of Education and Culture, No. 22 of 2016.

Thus, some researchers have conducted a preliminary study (in the form of a need-analysis study) on the development of a PE learning model, especially on physical fitness subject-matter for children with special needs. This research, however, aimed to investigate the need level of educational subjects, namely teachers and students, towards the development of a PE learning model for physical fitness.

## II. METHOD

A descriptive research method was used to elucidate the findings generated in this study. The participants of this research study include 34 PE teachers and 60 students at special schools. A combination of direct observation and questionnaire techniques were used to obtain data. The data were then analyzed using the descriptive percentage method.

## III. FINDINGS AND DISCUSSION

The result of the study conducted to investigate the need for the development of a PE learning model on physical fitness subject-matter at a special school in Yogyakarta Special Region is divided into two parts: students' needs and teachers' needs. The result of the analysis of students' needs is presented in Table 1, while that of teachers' needs is shown in Table 2.

TABLE 1. THE RESULT OF THE ANALYSIS OF STUDENTS' NEED FOR THE DEVELOPMENT OF A PE LEARNING MODEL

Scale	PE learning model which enables students to be active
Strongly Disagree	0%
Disagree	13 %
Agree	21%
Strongly Agree	66%

Table 1 shows that 87% of the students, which comprises those who agreed and strongly agreed, need the development of a PE learning model on physical fitness.

TABLE 2: THE RESULT OF THE ANALYSIS OF TEACHERS' NEED FOR THE DEVELOPMENT OF A PE LEARNING MODEL

Scale	Learning Process	Learning Instrument	Teachers' Need of Learning Model
Strongly Disagree	0 %	0 %	0%
Disagree	0 %	0 %	0%
Agree	63 %	39 %	0 %
Strongly Agree	37 %	61 %	100 %

Table 2 shows that 100% of teachers (which comprises those who agreed and strongly agreed) need an active learning process, good learning instrument, and a learning model on physical fitness subject-matter that is fun and effective towards the achievement of the expected learning outcome. However, there is no appropriate learning model, because the smoothness of a learning process depends on the students' condition, the characteristics of learning materials, and the availability of learning facilities and media, as well as the teachers' condition [8].

## IV. CONCLUSION

The findings generated in this study showed that there is a need, for the development of a learning model on physical fitness subject-matter that is fun and able to improve the level of students' activities. Furthermore, it is quintessential to conduct an advanced research on how the learning model can be developed to help students and teachers at special schools to achieve the expected learning outcome.

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