Indonesian Ninja Warrior for Physical Education in Elementary School

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Abstract---Not all television programs have a bad impact, one of which is Sasuke Ninja Warrior Indonesia, a program that requires dexterity and physical skills and according to research can be applied in the physical education class. The aim of this research is to get the game form from Indonesian Ninja Warrior (INW) that matches the characteristics of elementary school children. Twenty elementary students are served as subject for this study, by using R & D method. There are six stages; (1) analysis needed; (2) design; (3) prototype; (4) testing; (5) revision; and (6) validity and reliability of the test. Sasuke Ninja Warrior was adopted to create an INW for elementary school students with Indonesia traditional games included.

Keywords: Ninja Warrior, physical education, elementary school

I. INTRODUCTION

Student participation in Physical Education (PE) classrooms has the potential to develop physically individuals to have the knowledge, skills and confidence to engage in physical activity as a sustainable lifestyle choice [1], [2]. With proper instruction and practice, students can improve motor performance and increase the fitness component related to health, which is the foundation of participation for the future in games, sports and fitness [3], [4]. Therefore, it needs to be focused on developing motoric skills and fitness components early in life as a prerequisite for continued participation in physical activity and protection against obesity in the future [5], [6]

Previous research has shown that developmental learning experiences that are appropriate can specifically increase muscle strength and basic skill movement skills in children [7]. In addition, physical activity can strengthen muscles for children and adolescents [8]. Despite the importance of integrating fitness components related to health and skills described in the literature, there is an urgent need for implementation in school-based programs. General physical activity during childhood and adolescence is associated with many physiological and psychosocial benefits, and has the potential to improve the quality of life for boys and girls as they develop into adulthood [9].

Apart from these potential benefits, many studies have shown that children and adolescents are far less active than their predecessors and are often physically inactive. Because of the current state of children’s health, the National Task Force for Community Prevention Services in America and The Ministry of Education and Culture in Indonesia recommends modifying PE in schools in order to improve physical activity and improve physical fitness [10], [11]. These and similar recommendations have encouraged the need for and the development of new and creative approaches that provide opportunities for children and adolescents to participate in routine health-based physical activities [12]-[14]. Therefore, physical education teachers need to seek inspiration from various fields.

Foreign culture spends most of the lives of many students. Therefore, it is important for all educators to recognize and embrace the latest television shows, video games, and cultural phenomena to be used as a platform for connecting important content with student interests. In recent years, a series of performances focusing on health, fitness and dance have provided unique opportunities for sport [14]. Performances such as Dancing with the Stars, The Biggest Loser and Celebrity Fit Club have aroused audience interest and encouraged many people to pursue a healthier lifestyle. Recently, the Sasuke Ninja Warrior Indonesia program has made fitness more attractive, bold and fun [15].

Sasuke Ninja Warrior Indonesia, is a game show in Indonesia and a spin-off competition from the Japanese television series Sasuke and broadcast on RCTI on December 20, 2015 [15]. The real arena is divided into 6 stages namely Challenge Stage, Warrior Stage, Stage 1 Semifinals, Stage 2 Semifinals, Final Stage, and finally the Mount Midoriyama Stage. The Mount Midoriyama stage is a phenomenal stage in Ninja Warrior. A tower built with a height of about 24 and 25 meters must be
defeated by the participants within 30 or 35 seconds to get the title of Ninja Warrior in Indonesia.

Usually, each stage emphasizes fitness components related to health and certain skills, but can change from season to season. Stage 1 consists of obstacles that test the agility and speed of competitors. The first stage is timed, and only the competitor who successfully completes it within the time limit is set to advance to Stage 2. Stage 2 consists of obstacles that test the competitor's strength and speed. Competitors must complete challenges that test their upper body strength in a given time. Just as in the first stage, only the competitor who successfully completes within the deadline switches to Stage 3. Stage 3 consists of obstacles that test the upper body and strength of the participants' grip. This is the only stage that has no time limit. Like Stages 1 and 2, only competitors who successfully complete Phase 3 continue. The last stage, Mount Midoriyama, consists of a 75 foot long climbing rope or other challenging climbing achievements. Competitors must complete the climb and press the bell in less than 30 seconds [14], [15].

Ninja Warrior's main focus is to show off the health components related to health and the most specific skills for speed, strength and functional agility. While the fitness components related to health and skills such as cardiorespiratory endurance, coordination, power, speed and reaction time are usually associated with extracurricular sports, each has important goals and values and must therefore be included in the PE [16]. This focus is directly related to National Standard 3 about the education process, namely "in the implementation of learning in educational units carried out in interactive, inspirational, challenging, and motivating students to actively participate. The teaching-learning process also provides space for creativity, initiative, and independence in accordance with the interests, talents, and psychological/physical development of the students [17], [18]. Many of the benefits associated with adult resistance training programs can be achieved by children and adolescents who follow age-specific guidelines for resistance training [8], [19].

This study will highlight the implementation of Indonesia Ninja Warrior (INW) in the teaching of PE and identification of the stages of tasks that are in accordance with the characteristics of elementary school age children and as part of an outdoor laboratory.

II. METHODS

Modification of research and development (R & D) of Borg and Gall is used to do this study [20], [21]. There are six stages in this study; (1) analysis required; (2) design; (3) prototype; (4) testing; (5) revision; and (6) validity and reliability test. First, analysis required in the development of Indonesian Ninja Warrior (INW), focus group discussion is used to collect data in this stage. Second, design of INW by selected version modification from American Ninja Warrior [14], which was the main choice as the result of focus group discussion at the previous stage. Third, creating a prototype in accordance with the design intended in previous stage, where inserted with Indonesian traditional games. Fourth, after the product is completed, the next stage is to examine the design of INW. Twenty elementary students are served as subject for this study. This experiment is used to anticipate any possible errors, as well as to analyze the obstacles that may be encountered and tried to mitigate these constraints. Moreover, the next stage was product revisions; it aims to improve the product before the product is ready to be used. Revisions were based on review and input from PE teachers.

III. RESULTS AND DISCUSSION

Although INW is designed as a multistage challenge course, it is appropriate for the instructor to adjust and create PENW obstacles/courses that are appropriate for differing student abilities. These obstacles/courses may range from a sequence of three obstacle skills that address each of the selected components (e.g., strength, agility and balance), to a full multilevel showcase that highlights all health- and skill-related components of fitness. All activities should be taught and practiced multiple times in the months leading up to the main event. Poor form for any fitness-based activity is not desired and will likely hinder performance. In ANW, competitor success is measured by the speed of completion; so, if a competitor falls or fails to complete a task, their "run" has ended. However, the goal and/or objective of PENW is to successfully complete each task to the best of one’s ability. For this reason, if a student is unable to or has difficulty completing a task, rather than failing or being eliminated, he or she will continue until success is achieved or a maximum predetermined time is met. Physical educators may choose to have students compete in some of the following ways to address the needs, interests, skill levels and competitiveness of each class (for the
team competitions, it is strongly suggested that the physical educator create the teams to ensure they are equitable:

1. Personal improvement or personal best: Each student will have multiple opportunities to run through the course. Each run will be timed, and the student’s goal is to improve their time with each attempt.

2. Team competition: In a team of four participants (or a number that divides evenly into the number of obstacles), each participant completes four of the obstacles. Team completion time is recorded. To challenge students, they may be asked to complete the team competition a second time, but they must select different obstacles from the previous round(s).

3. Total team: Each of the four team members completes the entire course, with each recording their own completion time. All times are added and compared to previous completion times or against other groups. Maximum participation and time on task are always encouraged and recommended; however, with strenuous activities such as PENW obstacles, rest time is necessary. Lead-up activities allow students to practice each obstacle at their own pace and progress outside of the typical obstacle-course order. This practice time will provide the opportunity for the physical educator to structure the class so all students can participate fully. The final minutes of each class should be reserved for total stage completion. Additionally, progress charts may help students see gains in their physical fitness levels. These progress charts can be done daily, weekly or monthly at the team or individual level.

IV. CONCLUSION

The ultimate goal of PENW is to improve the fitness levels of students and to do so in a unique way in which students set personal goals while having fun. The job of physical educators is to promote physical activity by creating an environment in which students find enjoyment. The PENW unit bridges this gap and brings a new concept to the forefront. With this concept comes revived energy and excitement. And because PENW places the emphasis on personal growth, all students have an opportunity to find success. As students participated in these challenges, the energy throughout the school became contagious. Students challenged themselves and pushed their mental and physical limits, which also led to improvements in students’ self-esteem. From an affective perspective, students were encouraging one another and were excited to cheer one another on as they reached and surpassed their personal goals. It is hoped that this article will motivate and invite teachers to be creative in their classroom and design and implement a PENW challenge course that best suits the unique needs of their students. Contemporary American martial arts master O. Fred Donaldson (National Museum of Play, n.d.) said that children learn as they play, but more importantly, in play, children learn how to learn. The authors feel this concept is at the cornerstone of a PENW program. It is through the fun and high-energy personal challenges that students will learn and improve their physical fitness, which directly addresses the National Task Force on Community Preventive Services’ recommendations to modify school PE to better enhance physical fitness and develop new and creative approaches that provide opportunities for children and adolescents to participate in regular, health-based physical activities. Physical educators need to look for inspiration in a variety of areas and PENW is a new and fresh idea appropriate for students of all ages and abilities. Help students discover their inner warrior!

REFERENCES

[1] V. Balan, G. Marinescu, L. Ticala, and M. Shao, “Physical Education–Longlife Learning Factor,” Procedia - Soc. Behav. Sci., vol. 46, pp. 1328–1332, 2012.

[2] SHAPE America, “Status of physical education in the USA,” 2016.

[3] M. Behringer, A. vom Heede, M. Matthews, and J. Mester, “Effects of Strength Training on Motor Performance Skills in Children and Adolescents: A Meta-Analysis,” Pediatr. Exerc. Sci., vol. 23, no. 2, pp. 186–206, 2016.

[4] L. E. Robinson et al., “Motor Competence and its Effect on Positive Developmental Trajectories of Health,” Sports Medicine, vol. 45, no. 9, pp. 1273–1284, 2015.

[5] M. T. Cattuzzo et al., “Motor competence and health related physical fitness in youth: A systematic review,” Journal of Science and Medicine in Sport, vol. 19, no. 2, pp. 123–129, 2016.

[6] L. P. Rodrigues, D. F. Stodden, and V. P. Lopes, “Developmental pathways of change in fitness and motor competence are related to overweight and obesity status at the end of primary school,” J. Sci. Med. Sport, vol.
[7] L. M. Barnett et al., “Fundamental Movement Skills: An Important Focus,” J. Teach. Phys. Educ., vol. 35, no. 3, pp. 219–225, 2016.

[8] R. S. Lloyd et al., “Position statement on youth resistance training: The 2014 International Consensus,” Br. J. Sports Med., vol. 48, no. 7, pp. 498–505, 2014.

[9] S. & N. President’s Council on Fitness, “Presidential Youth Fitness Program: Facts and statistics.” 2017.

[10] D. K. Eaton et al., “Youth Risk Behavior Surveillance &x2014; United States, 2011,” Morb. Mortal. Wkly. Rep. Surveill. Summ., vol. 61, no. 4, pp. 1–162, 2012.

[11] A. Suherman, “IMPLEMENTASI KURIKULUM BARU TAHUN 2013 MATA PELAJARAN PENDIDIKAN JASMANI (Studi Deskriptif Kualitatif pada SDN Cilengkrang),” Mimb. Sekol. Dasar, vol. 1, no. 1, 2016.

[12] M. Bukowsky, A. D. Faigenbaum, and G. D. Myer, “FUNdamental Integrative Training (FIT) for Physical Education,” J. Phys. Educ. Recreat. Danc., vol. 85, no. 6, pp. 23–30, 2014.

[13] A. Farrell, A. Faigenbaum, and T. Radler, “Fun & Fitness with Balloons,” Strategies, vol. 24, no. 1, pp. 26–29, 2013.

[14] L. E. Bruno and A. Farrell, “PE Ninja Warrior: Designing an American Ninja Warrior Unit for Physical Education,” Strategies, vol. 30, no. 6, pp. 20–32, 2017.

[15] Wikipedia, “Sasuke Ninja Warrior Indonesia,” 2015.

[16] G. D. Myer, A. D. Faigenbaum, K. R. Ford, T. M. Best, M. F. Bergeron, and T. E. Hewett, “When to initiate integrative neuromuscular training to reduce sports-related injuries and enhance health in youth?,” Current Sports Medicine Reports, vol. 10, no. 3, pp. 157–166, 2011.

[17] Permendiknas, Peraturan Menteri Pendidikan Nasional Republik Indonesia Nomor 41 Tahun 2007 Tentang Standar Proses. Indonesia, 2007, pp. 1–2.

[18] Depdiknas, Permendiknas.No.22 tentang Tujuan Pendidikan Jasmani Olahraga dan Kesehatan. Indonesia: Jakarta: Depdiknas, 2006.

[19] A. D. Faigenbaum, “Youth resistance training,” J. Strength Cond. Res., vol. 23, no. 5 Suppl, pp. S60–79, 2009.

[20] M. Damien Gall, “Walter R. Borg,” J. Exp. Educ., vol. 59, no. 2, pp. 107–109, 2014.

[21] & B. Gall, Gall, “Chapter 8, Questionnaire & Interview Data,” in Collecting research data with questionnaire and interviews, 1996.