



Original Article

Effect of physical activity based on traditional games on the psychological well-being of elementary school children.

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ABSTRACT

A holistic learning program is essential to provide high-quality human resources (HR) in the education system. An optimal human resource is attained through a healthy child development process physically and psychologically. Children will experience physical, cognitive, emotional, and psychosocial changes or the child development phase. This study aims to identify the effect of traditional game-based physical activities on the psychological well-being of elementary school children at MI Sabilul Huda Jimbaran. The qualitative experimental method, particularly a one-group pretest-posttest design, was applied as the research design. Moreover, the research instrument employed the questionnaire by purposively involving 80 students selected from fourth and fifth grade. They were the students of MI Sabilul Huda Jimbaran. This study's data analysis covers validity, reliability, normality, and hypothesis tests. The results indicated that physical activities based on traditional games significantly affect elementary school children's psychological well-being.

Keywords: traditional games, psychological well-being, elementary school students

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INTRODUCTION

Education programs should be implemented comprehensively to provide qualified human capital. An adequate education program includes physical and psychological activities with a proportional formula. It is essential to prepare children starting from early childhood, to obtain adequate resources (Ashadi, 2016).

Resource development starts with physical activities for children. One is physical education through traditional games such as 'Gobak Sodor, Engklek, Betengan, Petak Umpet' and other similar games. The media should be chosen to make children fun and make them feel comfortable to support their physical growth and psychological development. Sports activities are related to physical health and improve the psychological state of children through physical activity (Rochelle, 2013).

During this digital era of globalization and modernization, many problems exist for physical activities based on traditional games because children at early ages, including elementary school age, are affected by digital games, such as online games. Most children in the digital era are increasingly far from traditional games, a form of ancestral heritage useful for all aspects of child growth and development. This condition is motivated by the transfer of digital games in smartphones, tablets, laptops and internet network infrastructure from various mobile operators that are easily accessible and accessible (Novrialdy, 2019). So, the Indonesian nation, which is rich in noble culture, has lost the value of morals and identity, especially for the younger generation, and this situation has become a serious problem caused by the invasion of Western culture (Riyadi, 2018).

Before the pandemic of Covid-19, many children practised physical activity by exercising regularly, but during the pandemic, they switched to non-physical activities by playing social media, including online games (Fitri, 2021). Some of the impacts of online gaming and the like result in decreased endurance due to the absence of physical activity, spending much time sitting, lack of discipline at mealtimes, and exposure to x-ray radiation from the gadgets used. These impacts can hinder mental development, interfere with the process of self-maturation, reduce learning achievement, develop bad attitudes, and make them difficult to get along with others or be selfish (Riyadi, 2018).

Elementary child development is a transitional process in physical, cognitive, emotional, and psychosocial conditions (Kostelnik et al., 2014). Development in children includes physical and psychological aspects, which cannot be separated and must be implemented together (Latifah, 2017).

The kinds of experiences children have in traditional games enable children to develop psychological behaviours used for physical activities. By playing, children will develop based on their ability to think, and experience the development of verbal language, reading, knowing the rules to socialize, tolerance, cooperation and sportsmanship which are affected by the experience they have gained (Mulyasa, 2014). Physical, psychomotor, cognitive and affective aspects can develop in a balanced way through interaction in the form of physical activities in the form of traditional games. Quality physical activities that are part of physical education are essential to be presented properly and correctly, so it will foster children's comprehensive development (Mashuri & Pratama, 2019).

Psychological happiness is a condition where a person behaves well towards himself and others. Moreover, he can decide and carry out his behavior, control the environment proportionally, have a life target wisely, and develop his potential (Maria et al., 2020). Psychological happiness has six dimensions: self-acceptance, positive relation with others, autonomy, environmental mastery, life goal and self-growth. In this study, researchers focus on positive relations with others.

Self-acceptance describes self-realization, maximum functioning and mature life processes. Positive relations with others require a certain ability to build positive and warm relationships, namely the relationship between self and based on mutual trust, tolerance, and mutual love for one another. Autonomy can be defined as an individual's skill for self-determination, self-independence, internal control, and organizing personal actions (Małgorzata et al., 2021)

The capability to select or create surrounding harmonious conditions with the psychological condition manifests environmental mastery (Ma et al., 2020). The life goal of a decent life target is when a person has a directed life target that is meaningful to both past and present life experiences and is confident that they are suitable for the expected life (Grijalva & Freeman, 2021). A person's potential to develop themselves continuously will also be able to develop themselves as a fully-fledged human being.

Psychological well-being is influenced by age, gender, physical health (healthy living behavior), social status, economic life, social support conditions,

education level and employment status, relationships with people and religion (Arslan et al., 2021). In this study, the researcher focuses on the physical health factor (healthy living behavior) because this factor is related to physical activity. The empirical data and case studies show that a happy and prosperous life is related to a person's general health (Pressman & Gallagher, 2020).

This description shows that physical activity based on traditional games is closely related to children's psychological well-being. There are three aspects contained in physical education in traditional games. They are cognitive, psychomotor and affective (Astuti, 2016).

Movement skills are a cognitive domain that sports teachers are responsible for providing learning to students through various sports, including traditional games. Sports activities include traditional games, with motion teaching as skill development to help learners perform efficiently in routine life (Astuti, 2016).

Sports teachers must teach about physical and psychological health in sports education to students in order to have enough knowledge so that students have movement skills or sports in general that are beneficial for physical health and the development of psychological well-being. The concept of exercise is applied to gain health. That model describes the relationship between psychological, psychosocial and social health as a result of doing team sports (Rochelle, 2013).

In conducting proper sports activities, children should be physically fit. That fitness can reduce depression and anxiety in children, which subsequently will affect children's psychic or psychological condition to healthy. Sports conducted well through team formation will make children interact with each other and understand what obligations should be fulfilled. Then, students will help each other in team tasks that are mutually empathetic so that a healthy group or psychosocial relationship is formed (Rochelle, 2013). The integration of psychological and psychosocial conditions will reduce tension or anxiety, in it will eventually create health in order to achieve psychological well-being.

Previous research has suggested many benefits of physical activity or exercise, such as health, social and psychological benefits, which generally

include self-esteem and social interaction (Rochelle, 2013). However, the massive exposure and research on physical activity in high-income countries such as Australia do not necessarily provide perfect psychological aspects with empirical evidence that the psychological motivation to do physical activity could be more active or higher (Stuart, 2021).

Based on the explanation, this study aims to identify the effect of traditional game-based physical activities on the psychological well-being of elementary school-age children at MI Sabilul Huda Jimbaran. As a tool to describe the influence between the two variables or the influence between the concepts of the problem under study in line with the literature review, a framework is needed. Therefore, the researcher proposes a hypothesis that traditional game-based physical activity affects the psychological well-being of elementary school children at MI Sabilul Huda Jimbaran.

METHOD

This research uses a quantitative experimental design, particularly one group pre-test-post-test. The research procedure was implemented in three stages, i.e. a) pre-test, b) treatment, and c) post-test. The detailed procedure is presented in Table 1 as follows.

Table 1. Research Design (One group *Pretest – Posttest*)

Pre-test	Treatment	Post-test
O ₁	X	O ₂

The research samples included 40 grades 4 and 5 students in MI Sabilul Huda Jimbaran. The research subjects were selected purposively from middle-class elementary school children 10 to 11 years of age, students in grades 4 and 5. The age selection can represent the age of elementary school in general. The research participants cover male and female students to provide comprehensive results. The stages of this research are as follows: 1) preparation of dimensions or scales of psychological well-being (PWB); 2) the phase of making blueprints and instruments; 3) selection of participants and delivery of information; 4) implementation of research; 5) analysis of research results.

In exploring the effect of traditional game-based physical activity on psychological well-being (PWB), the data were taken with a questionnaire instrument on each sample with Ryff's PWB scale consisting of six dimensions, i.e., 1) self-acceptance; 2) good relationships with others; 3) independence; 4) environmental mastery; 5) life goals; 6) self-development. This scale consists of 42 items that will first test its reliability. After that, pre-tests and post-tests were held using reliable items.

This study applied validity, reliability, and hypothesis tests as data analysis techniques. In this case, the validity test describes the instrument's ability to investigate what it is supposed to measure. The test includes content validity as well as item validity. On the other hand, the instrument's ability measures content is called content validity. Meanwhile, item validity is reached by testing the validated instrument (Azwar, 2017).

The index shows how well the measuring instrument is relatively consistent, and this test is implemented to explore whether the instrument has been consistent so that the instrument tested for reliability can be reused in the future to measure the same variable defined as reliability. Instrument reliability testing uses the Alpha Cronbach formula (Arikunto, 2016). The partial T-test used in hypothesis testing serves to determine the significance of the effect of each independent variable on the dependent variable as a record of other independent variables not changing (Sugiono, 2020).

RESULTS AND DESCRIPTION

Results

The sample of this study consisted of 40 students of class 4B and 40 students of class 5B studying at MI Sabilul Huda Jimbaran, so the total sample was 80 children. Each student took part in a pre-test presented in a questionnaire before the students received treatment. The treatment was conducted through traditional games in physical activity, i.e., Betengan, Petak Umpet, Gobag Sodor and Engklek' according to the schedule determined and guided by the sports teacher. Afterwards, the students participated in the pre-test, presenting a similar questionnaire as the pre-test.

Before proving the hypothesis, it is crucial to take the following steps, i.e., traditional game validity test, PWB validity test, traditional game reliability test, PWB reliability test, normality test and finally, the t-test to investigate whether the research hypothesis is correct.

Pair Test t Test

This t-test was applied to examine the hypothesis stating that two samples were selected randomly from the same population. The results show that there is no significant difference, and to determine the correlation coefficient, here is the t-test.

Table 2. Paired Samples Statistics Psychological Well-Being

	Mean	N	Std. Dev	Std. error Mean
Pre-test	61,25	80	3,132	0,350
Post-test	86,71	80	5,183	0,580

Table 3. Paired Samples Correlations Psychological Well-Being

	N	Correlation	Sig.
Pre & Post-Test	80	0,731	0,040

Table 4. Paired Sample Test
Paired Differences

	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)
				lower	upper			
Pre & Post-Test	-25,463	5,403	0,604	-26,665	-24,26	-42,154	79	0

The output shows the results of the Pre Test variable correlation test with the Psychological Well-Being Post Test variable. These results show the correlation coefficient value at 0.731 and the significance value (Sig.) at 0.040. The value of Sig. 0.040 < 0.05, a strong and positive relationship exists between the Pre-Test and Post Test variables.

Based on the Paired Samples Test of the output table, the value of Sig. (2-tailed) is 0.040 < 0.05, so H₀ is rejected, and H_a is accepted. Therefore, it can be concluded that physical activity is affected based on traditional games on the

Psychological Well-Being of Elementary Age Children at MI Sabilul Huda Jimbaran.

The table of Paired Samples Test results indicates the value of Mean Paired Differences, which are - 25.463. This value indicates the difference between the average Pre Test results and the average Post Test results or $61.25 - 86.71 = -25.46$ and between -26.665 to -24.260 (95% Confidence Interval of the difference Lower and Upper). Comparing the calculated t value with the t table The Paired Samples Test results indicate that the t-value is negative, which is -42.154. The calculated t-value is negative because the average value of the Pre Test learning outcomes is lower than the average Post Test learning outcomes. A negative t-value can mean positive in this situation, so the t-value amounts to 42.154.

It indicates that $t \text{ count } 42.154 > t \text{ table } 1.99045$; for the basis of decision-making, it is assumed that H_0 is rejected and H_a is accepted. The conclusion is that there is an average difference between the Psychological Well-Being Pre Test and Post Test, which means that there is an effect of traditional game-based physical activity oPsychological Well-Being of Elementary Age Children at MI Sabilul Huda Jimbaran.

Discussion

The results mean that the research hypothesis is accepted. It is assumed that there is a significant influence after participating in traditional games. These findings align with experts' opinion that psychological well-being will be formed if physical activity is based on traditional games, and there are three aspects contained in physical education in traditional games, such as; cognitive, psychomotor and affective (Astuti, 2016).

Previous research has suggested many benefits of physical activity or sport, namely providing health, social and psychological benefits, which generally are self-esteem and social interaction (Rochelle, 2013). One factor that influences psychological well-being is physical health related to traditional game-based physical activity.

Therefore, to improve the psychological well-being of elementary school-age children, traditional game-based physical activities are needed that are tailored to the abilities of elementary school-age children. In this study, the use of

traditional games *betengan*, *ankle*, *gobag Sodor*, and *hide and seek* requires a lot of physical activity, which in the end, students are happy and become physically healthy and improve their psychological well-being.

This study's results are similar to Rochelle's (2013) that in team sports such as traditional games, students will help each other in team tasks that empathize with each other to form a healthy group or psychosocial relationship. Combining psychological and psychosocial conditions will reduce tension or anxiety and ultimately create health to increase psychological well-being.

Referring to the explanation above, it means that the hypothesis of this study is proven because the t value is $42.154 > t$ table 1.99045 . Thus, it is concluded that H_0 is rejected and H_a is accepted. The conclusion is that there is an average difference between the Psychological Well-Being Pre-Test and Post-Test. The effect of traditional game-based physical activity on the Psychological Well-Being of elementary school-age children is that physical activity in the form of traditional games has an impact on increasing psychological happiness in elementary school-age children significantly.

The factor that causes physical activity in traditional games is that children will be physically fit. The dynamics of the influence of physical activity in the form of traditional games on psychological well-being shows that the results of the correlation test of the Pre Test variable with the Post Test Psychological Well-Being variable, the correlation coefficient value is 0.731 with a significance value (Sig.) of 0.040 . due to the value of Sig. $0.040 < 0.05$. Moreover, a strong and positive relationship exists between the Pre Test and Post Test variables. These results indicate that physical activity in the form of traditional games has a positive effect on psychological well-being.

CONCLUSIONS

Based on the research and discussion results, the researcher concluded that physical activity based on traditional games effectively improves psychological well-being in elementary school children at MI Sahibul Huda Jimbaran. This study was limited to one X-variable and one Y-variable due to the limited research time and the limitation of knowledge about traditional game-shaped

activities and the psychological well-being of elementary-aged children. This study only took 80 samples from an elementary school or Madrasah Ibtidayah.

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