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## ANALYSIS OF PHYSICAL ACTIVITY TO IMPROVE STUDENTS BASIC MOVEMENT SKILLS PHYSICAL LITERACY BASED PRIMARY SCHOOL

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**Abstract** This literature review study is based on this the current education pattern cannot accommodate the needs of each individual to grow optimally. Most current education patterns do not provide enough space for students' uniqueness in carrying out physical activities. Mastery of basic movements needs to be given to children in the form of physical activity. Physical activity that is designed needs to increase and stimulate children to move without compulsion. The physical activity provided can be in the form of *Physical Literacy*. The literature review method was carried out on three articles obtained from a number of databases, PubMed, EBSCO, and Springer Link. Keywords for searching articles are physical activity, *physical literacy*, basic movement skills, *physical literacy*. Researchers use "AND" as a Boolean operator. The results of the literature review are that the development of a physical activity model to improve elementary school students' basic movement skills is based on *physical literacy*. The results of the review article are: 1) Physical activity improves health, 2) Good physical literacy knowledge in children aged 7-12 years, 3) Developing physical literacy. The conclusion from the literature review is that understanding physical activity based on the concept of physical literacy can improve health. A high understanding of physical literacy is related to the holistic development of children aged 7-12 years, namely if a person's body is healthy then they will grow and develop optimally. Traditional games can develop elementary school students' physical literacy. These results are based on the improvement achieved by students in the aspects of understanding how to perform movements, movement skills and enjoyment.

**Keywords:** *Physical activity, basic movement abilities and Physical Literac*



## INTRODUCTION

In the current era, there has been rapid development, especially in the development of information technology and automation. Education must be able to prepare students to be able to think critically, creatively, collaboratively, communicatively and literately (Wijaya, Sudjimat, & Nyoto, 2016). In line with this, current physical education learning outcomes generally lead to encouraging students to have the motivation and ability to understand, communicate, apply knowledge, analyze movements critically in various ways, and demonstrate movement flexibility confidently, competently and creatively. or what is better known as *physical literacy* (Higgs, Balyi, Way, Cardinal, Norris, & Bluehardt, 2008; Butler & Griffin, 2010).

Physical education in Indonesia is an integral part of the overall education system, aiming to develop aspects of health, physical fitness, movement skills, critical thinking skills, emotional stability, social skills, reasoning and moral actions through physical activities planned systematically within the framework of the system. national education (Ministry of National Education, 2004). Physical

education plays an important role in maintaining physical and mental health, developing motor skills, improving quality of life, and promoting positive values. If each individual is allowed to develop in the right and perfect way, he will have the potential to achieve various successes in life

A decrease in physical activity as well as an increase in time spent in sedentary activities such as watching television programs and use of other electronic media are considered to be the main causes. During increasing levels of sedentary behavior energy expenditure decreases while energy intake remains unchanged. This causes an increase in the prevalence of overweight and obesity in children. The tendency for children at this time to experience limitations in movement. Children are more preoccupied with gadgets, more preoccupied with games or like *junk food*. The problem of childhood overweight and obesity is becoming more prevalent. Sedentary behavior and lack of physical activity are considered health risk factors.

This sedentary lifestyle can cause increased energy storage which is then stored as fat deposits which ultimately causes overweight or obesity. Dietary

factors and physical activity can influence the emergence of obesity both together and individually

Many elementary school students experience degenerative diseases caused by a lack of movement (inactivity), namely *noncommunicate diseases* (NCDs) and other general health problems such as obesity, heart attacks, hypertension, cancer and diabetes (WHO, 2014). On the other hand, students also experience delays in social, emotional and cognitive development that occur throughout their lives, have low movement skills, show a less active attitude in learning than students who have good movement skills (Williams, Pfeiffer, O'neill, Dowda, McIver, Brown, & Pate, 2008).

This fact shows how important it is to provide correct and systematic experiences of a variety of movements to children. Multilateral development in the skill development phase as movement variability, where this diversity of movements provides a variety of diverse movement experiences, children will have stronger movement patterns and awareness to be able to perform more efficiently in a variety of varied situations.

The concept of physical literacy has been widely used in developed countries. Physical literacy has been established as a goal in education. And the most important thing is the implications of the concept of physical literacy. Physical literacy is defined as the foundation in the formation of behavior, awareness, understanding of active lifestyles, enjoyment in carrying out activities, the ability to identify, understand, interpret, respond effectively in utilizing body movement abilities in a wide and varied context (Tremblay & Lloyd, 2010; Whitehead, 2013).

Physical Literacy must be selected, planned and when delivered it can be used as a learning center for students. This learning content must be designed to develop students' motivation, self-confidence, physical competence and knowledge and understanding. The content given to students is the "what" and "how" to be informed in physical literacy (Durdin-Myers et al., 2018). The role of physical education is very important in the formation of physical literacy in children, where cognitive, affective and psychomotor aspects are included in the objectives of physical education. By

strengthening physical literacy in children, it is hoped that it can provide motivation, confidence and enthusiasm to continue doing physical activities. By doing physical activity with children, the body's immunity will increase, so that the child's body will stay fit and maintain health. We must be aware that physical activity is important for maintaining health, especially during the current pandemic.

Physical education teachers must be truly aware of the forms of movement they are designing, so that they can be developed and applied in physical education in various movement contexts. This means that physical education content does not only focus on physical activity experiences, but must also consider the development of competencies that are meaningful and beneficial for students in every movement, by balancing quality and quantity. Too much time will result in boredom, while too little time will not provide meaningful results for students.

The development of physical activity in *physical literacy* for students should be the full attention of teachers who teach Physical Education, especially in elementary schools (SD) in Indonesia. This is because physical

education in elementary school has an important role in student development, namely encouraging students to learn movement so they can improve movement skills, develop fitness, increase knowledge about movement, stimulate them to be active in doing movement. Related to these problems, an effort is needed to implement appropriate learning and in accordance with the current physical education learning outcomes for elementary schools. As for implementing physical education, it must be carried out consistently in a way that is enjoyable for students (Domville, Watson, Richardson, & Graves, 2019).

Based on this phenomenon, this literature review was carried out to achieve the aim of developing a physical activity model to improve elementary school students' basic movement skills based on *physical literacy*. The aim of the literature review study is to obtain results from the development of a physical activity model to improve elementary school students' basic movement skills based on *physical literacy*.

## **METHOD**

The purpose of a literature review or literature review is to provide a

comprehensive overview of research that has been previously conducted in a particular field. The method used in the literature review is a systematic approach to analyzing data using a simplified approach. Randomized Controlled Trials (RCT) research design article by tracing the results of experimental research in English. The articles used are focused on original empirical research articles or research articles containing the results of actual observations or experiments where there are abstracts, introductions, methods, results and discussions. The article search strategy uses databases available on the e-resources of the National Library of the Republic of Indonesia, including EBSCO, PubMed and Springer Link. Key words in finding articles are stretching exercise, balance for the elderly, strength for the elderly, resisted exercise for the elderly.

Researchers use "AND" as a Boolean operator. The use of the Boolean operator "AND" aims to combine different concepts and aspects as search keywords so as to narrow down the documents to be obtained (Ramdhani et al., 2014).

Inclusion data to determine the criteria for literature review material,

namely: 1) Randomized Controlled Trials (RCT) research design articles, 2) experimental research, 3) Original articles from primary sources. 4) Research articles published from 2013 to 2022, 5) Full text articles in English, 6) Respondents in the articles are elementary school students 7-12 years old. As for Exclusion data are: 1) Articles published over the last 10 years/before 2013, 2) Articles in Indonesian. 3) The article only contains the abstract or part of the text, 4) Respondents in the research are elementary school students 7-12 years old 5) Literature review article.

To maintain the quality of the literature review, the author refers to ethical considerations from Wager & Wiffen (2011), namely avoiding duplication publication, avoiding plagiarism, transparency, and ensuring accuracy. Article searches use several sources from databases available on e-libraries and resources. All the articles obtained were research articles that did not use RCTs and were experimental, not full text, respondents in the research were elementary school age 7-12 years. The data analysis used in this literature review is a simplified approach. The simplified approach is data analysis by

compiling each article obtained and simplifying each finding (Aveyard, 2014).

The stages taken in the simplified approach analysis include summarizing each literature. Critical appraisal/critical review is carried out simultaneously to determine the strengths and weaknesses of the literature and to see the relationship between one literature and other literature, identifying themes from the results of each research in the literature where the themes are generated. must reflect the research question from the literature review, develop themes by combining all the same themes, discuss the strength of the findings by considering research results with stronger evidence or weak evidence by conducting a *critical appraisal* in the first step, naming each theme by considering the correct name. appropriate to each theme by understanding the literature so that the name of the theme is closer to the results of research in the literature, comparing and looking again at each theme by checking two things, namely: each theme has got the right name, and collecting the themes into one correct theme , closely monitoring the similarities and differences of each theme, then

analyzing in depth and considering how each theme can be related to each other, reviewing the critical appraisal of each literature so that we can assess whether the existing themes can answer each research question.

Critical appraisal uses the JBI Critical Appraisal for Experimental Studies instrument to carry out the evaluation and analysis process of the articles being reviewed, especially to see the results, validity and relevance of the articles to the Randomized Controlled Trials (RCT) research design and other experimental research.

## **RESULTS**

### **Data analysis**

Data analysis was carried out systematically using a simplified approach. Search results for articles discussing physical activity and *physical literacy* in improving basic movement skills included 3 EBSCO articles, 18 articles in PubMed, and 200 articles in Springer Link. The total articles obtained at the start of the search according to the specified keywords were 221 articles. There are keywords in finding articles, namely *physical literacy* , balance for the elderly, strength for the elderly, strengthening exercise for the elderly. Researchers use "AND" as a Boolean

operator. The use of the boolean operator "AND" aims to combine different concepts and aspects as search keywords so as to narrow down the documents to be obtained (Gradin & Björklund, 2021).

### **Critical Appraisal**

The critical appraisal/critical study using JBI Critical Appraisal for Experimental Studies included three articles in the inclusion criteria. The discussion of each article can be seen in Table 1.

### **Summary**

A summary of the literature review regarding the development of a physical activity model to improve elementary school students' basic movement skills based on *physical literacy* was carried out by creating an analysis matrix. The summary results obtained are that physical activity to develop basic movement skills in elementary school students based on physical literacy can be applied in physical education learning so that it is necessary to allocate adequate time in elementary schools to improve basic movement skills in elementary school

students. The results of the analysis show that before and afterwards showed significant improvement. Of the 20 test instruments, all of them lead to good physical literacy knowledge in children aged 7-12 years. They have a high understanding of physical literacy. This is related to the holistic development of children aged 7-12 years, namely if a person's body is healthy then they will grow and develop optimally.

Thus, it can be concluded that physical activity based on physical literacy in elementary school students can be an effective approach in improving basic movement skills. This research shows that physical literacy has a positive effect in improving basic movement skills in elementary school students. The main finding of this research is the mastery of basic movements, basic movement skills and basic sports skills which enable children to be able to read the child's environment and make the right decisions and enable them to move confidently and with control in various physical activity situations (Romi, 2016 ).

**Table 1. Matrix Data analysis in articles used in literature reviews**

<i>Author, Title Journal</i>	<i>Method Design</i>	<i>Results</i>
Understanding physical literacy in the context of health: a rapid scoping review	methods adapted for a rapid review approach	Results: After removal of duplicates, our search identified 475 articles for title and abstract screening. After full-text review,

<p>Katie Cornish<sup>1</sup>, Gloria Fox<sup>2</sup>, Trina Fyfe<sup>3</sup>, Erica Koopmans<sup>1</sup>, Anne Pousette<sup>4</sup> and Chelsea A. Pelletier<sup>5*</sup>                  Cornish et al. BMC Public Health (2020) 20:1569  <a href="https://doi.org/10.1186/s12889-020-09583-8">https://doi.org/10.1186/s12889-020-09583-8</a></p>		<p>17 articles were included (12 original research papers and five conceptual or review papers). There was near consensus among the included papers with 16 of the 17 using a Whiteheadian definition of physical literacy. The involvement of health care providers in the concept of physical literacy is still limited. Physical literacy was associated with the following health indicators: BMI and body weight, waist circumference, cardiorespiratory fitness, physical activity, and sedentary behavior. The primary demographic focus of the included studies was children and there was a conceptual focus on the physical domain of physical literacy.</p>
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<p>Analysis of Physical Literacy Knowledge of Children Aged 8-12 Years in Physical Education Learning.                  Majumi Nur<sup>1</sup>, Ians Aprilo<sup>2</sup>                  Makassar State University, Indonesia                  Email: <a href="mailto:masjumi.nur@unm.ac.id">masjumi.nur@unm.ac.id</a>                  ISBN: 978-623-387-014-6</p>	<p>quantitative research,</p>	<p>Of the 20 test instruments, all of them lead to good physical literacy knowledge in children aged 8-12 years in the city of Makassar. They have a high understanding of physical literacy. This is related to the holistic development of children aged 8-12 years, namely if a person's body is healthy then they will grow and develop optimally. A person's health depends on physical activity supported by good nutrition. The ideal development of a child is harmony between physical, cognitive, affective, social and emotional development. This physical literacy cannot be separated from the role of a physical education teacher who provides the basics of physical activity and correct understanding of physical activity, so they can do it independently.</p>
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<p>Traditional games: an approach to developing students' physical literacy in elementary school.</p> <p>Uray Gustian Department of Sports Coaching Education, Tanjungpura University, Jl. Prof. Dr. H. Hadari Nawawi, Bansir Laut, Southeast Pontianak District, Pontianak, West Kalimantan Province, 78124, Indonesia</p> <p>SPORTIF Journal: Journal of Learning Research Vol. 6 No. 1, April 2020, pp. 199-215 <a href="https://doi.org/10.29407/js_unpgri.v6i1.14252">https://doi.org/10.29407/js_unpgri.v6i1.14252</a></p>	<p>one shot case study design.</p>	<p>Traditional games can develop elementary school students' PL. This result is based on the improvement achieved by students in the aspects of understanding how to perform movements, movement skills, and enjoyment from the first and second trials. Apart from that, there was an increase in the achievement of students' PL measurement results from the first and second meeting trials.</p> <p>The results achieved were due to traditional games being modified according to the characteristics of student development. In the aspect of understanding in carrying out movements in accordance with students' pre-operational thinking abilities. Aspects of movement skills are adapted to fundamental movement skills which are the stages of movement development that occur in students. Aspects of fun, traditional games are developed using a play approach and activities that are designed to be challenging, so that they attract students' interest. In addition, game modifications were carried out taking into account the principles and aspects of developing learning activities for elementary school students.</p>
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### Literature Review Results

As a result of the literature review in the article, the author found that there was an influence of physical literacy-based physical activity on elementary school students' basic movement skills. Each result produces

three major themes, namely: physical activity improves health, physical, cognitive, affective, social and emotional development and movement skills.

The first thematic finding is that physical activity improves health. The

involvement of health care providers in the concept of physical literacy is still limited. Physical literacy was associated with the following health indicators: BMI and body weight, waist circumference, cardiorespiratory fitness, physical activity, and sedentary behavior. The primary demographic focus of the included studies was children and there was a conceptual focus on the physical domain of physical literacy. Understand the measurement of each domain of physical literacy,

The second thematic finding is good physical literacy knowledge in children aged 7-12 years. They have a high understanding of physical literacy. This is related to the holistic development of children aged 7-12 years, namely if a person's body is healthy then they will grow and develop optimally. A person's health depends on physical activity supported by good nutrition. The ideal development of a child is harmony between physical, cognitive, affective, social and emotional development.

The third thematic finding is that traditional games can develop elementary school students' physical literacy. This result is based on the improvement achieved by students in the

aspects of understanding how to perform movements, movement skills, and enjoyment from the first and second trials.

## **DISCUSSION**

### **1. Physical activity improves health**

Advance understanding of physical literacy concepts as they relate to health and the health care environment. Despite efforts to understand the measurement of each domain of physical literacy, the utility of this concept in a health context is not well known or understood in the academic literature. The nature and direction of the relationship between physical literacy, physical activity, and health requires further exploration with consideration of the theoretical foundations of physical literacy as a holistic concept. This research is needed to clarify the role of physical literacy as a catalyst for increasing physical activity, reducing the burden of disease, and improving health and well-being.

### **2. Good physical literacy knowledge in children aged 7-12 years**

High understanding of physical literacy. This is related to the holistic development of children aged 7-12 years, namely if a person's body is

healthy then they will grow and develop optimally. A person's health depends on physical activity supported by good nutrition. The ideal development of a child is harmony between physical, cognitive, affective, social and emotional development. This physical literacy cannot be separated from the role of a physical education teacher who provides the basics of physical activity.

### 3. Develop physical literacy

Traditional games can develop physical literacy in elementary school students. This result is based on the improvement achieved by students in the aspects of understanding how to perform movements, movement skills, and enjoyment from the first and second trials. Apart from that, there was an increase in the achievement of students' physical literacy measurement results from the first and second trial meetings. The results achieved were due to traditional games being modified according to the characteristics of student development. In the aspect of understanding in carrying out movements in accordance with students' pre-operational thinking abilities. Aspects of movement skills are adapted to fundamental movement skills which are the stages of movement development

that occur in students. Aspects of fun, traditional games are developed using a play approach and activities that are designed to be challenging, so that they attract students' interest. In addition, game modifications were carried out taking into account the principles and aspects of developing learning activities for elementary school students.

### CONCLUSION

Based on the results of the literature review of three articles, several main conclusions can be drawn, namely that understanding physical activity based on the concept of physical literacy can improve health. A high understanding of physical literacy is related to the holistic development of children aged 7-12 years, namely if a person's body is healthy then they will grow and develop optimally. Traditional games can develop physical literacy in elementary school students. These results are based on the improvement achieved by students in the aspects of understanding how to perform movements, movement skills and enjoyment.

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