ISSN : 2087-927X (print)
ISSN : 2685-0516 (online)
Altius: Jurnal Ilmu Olahraga dan Kesehatan
Volume 13, No. 2, November 2024, pp. 213-226
http://dx.doi.org/10.36706/altius.v13i2.72

Phyiscal education games model to improve *physical literacy* skills of children

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ABSTRACT

UNESCO has identified that physical literacy is one of the important foundations in developing quality sports and education programs, and in some developed countries have even made policies to support physical literacy as part of educational programs. This study aims to improve the physical literacy of children aged 7-9 years based on basic movements in physical education learning through a variety of basic motion-based games. The research method is ADDIE with data analysis using presets and pretest experiments. and posttest. The sample used was 29 students of class V Public Alementary school 025 Cikutra. The sampling used is saturated sampling. The instrument chosen in data collection is by using a physical literacy questionnaire. Data analysis in this study used two types of analysis, namely presentation analysis to measure product feasibility and paired simple t-test analysis to determine the effect of applying basic motion variations on increasing children's physical literacy. Based on the feasibility results of the process of developing variations of basic motion games, a presentation score of 88% was obtained in the "Good" category while for the magnitude of the increase in students' physical literacy by 27% and even in this research it was found that variations of basic motion-based games had an effect on increasing physical literacy abilities in children aged 7-9 years. Therefore, this research concludes that by developing variations of games based on basic movements, children's physical literacy will increase, so it is hoped that this action can be applied to the implementation of physical education programs.
Keywords: Movement Pattern; Physucal Literacy; Kurikulum Merdeka

ARTICLE INFO

Article History:
Accepted : 29th May 2024
Approved : 12th August 2024
Available Online November 2024

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INTRODUCTION

The development and demands of changes that occur today become the homework of policymakers to formulate and implement the policies made, even in 2020 the central government, especially the Ministry of Education, Culture, Research and Technology under the leadership of the minister Mas Nadiem Makariem compiled, formulated and launched the curriculum concept resulting from the development of the curriculum in Indonesia before, namely the 2013 curriculum, where the curriculum is named the Merdeka Curriculum (Fadilah et al., 2020); The independent curriculum is compiled and implemented aimed at catching up and improving the quality of learning and education in Indonesia (Prianti, 2022). The emphasis on the application of the concept of an independent curriculum is not only on strengthening cognitive aspects but also on strengthening character aspects such as independence in learning and student skills that can be adjusted to the needs and learning abilities of students (Manalu et al., 2022). With the change in curriculum, it indirectly has a big impact on changes ranging

from changes in terms of learning outcomes to the learning process in each educational unit for each field of study, one of which occurs in the field of physical education, sports and health (PJOK).

PJOK is one of the mandatory fields of study with the number of JP per week as much as 3 JP as stated in the curriculum structure in the independent curriculum, even the learning outcomes in the PJOK field of study are inseparable from the achievement of movement aspects and character aspects, even in the learning outcomes document there are 4 elements of learning outcomes, namely elements of motion skills, motion knowledge, Utilization of motion and internalization of motion values (Kemendikbudristek nomor 008/H/KR/2022, 2022). The achievement of movement as a result of PJOK learning in schools has become a natural thing considering that one of the identities of PJOK learning is education through and about motion, where movement is a tool used in carrying out the educational process. There are many positive impacts or benefits that can be achieved from the PJOK learning process carried out in schools, including the impact on health. (Bailey et al., 2009), improvement of physical condition and motor abilities (Janssen & LeBlanc, 2010), improving learning consistency and achievement through a wide variety of motion-based games (Coe, D. P., Pivarnik, J. M., Womack, C. J., Reeves, M. J., & Malina, 2012); (Howie & Pate, 2012), in addition, PJOK learning activities in schools that implement the concept of motion games will have an impact on shaping student character / behavior (Pradana, 2021). Physical education taught in schools should not be underestimated, bearing in mind that the learning process in physical education at school students will be facilitated by the need for movement which will ultimately lead to the development of movement potential. (Donaldson et al., 2022). In fact, one of the main objectives of PJOK learning in schools is to educate students so that they become individuals who have the ability to physically *lietracy* (SHAPE National Standards for K-12 Physical Education., 2013); (Liu & Chen, 2021), even the general purpose of learning PJOK in independent curricula is one of how students are able to be physically literate (Kemendikbudristek nomor 008/H/KR/2022, 2022). Physical literacy itself speaks to motivation, self-confidence, physical competence, knowledge and understanding to maintain lifelong physical activity (Corbin, 2016), (Hulteen, R., Morgan, P., Barnett, L., Stodden, D., & Lubans, 2017). (Whitehead M, 2010) explaining the indications of students who have the ability in *physical literacy* can be seen from several indicators including they have the ability to move skillfully, are fully involved in every type of movement activity in learning, have a strong motivation to actively participate in movement and feel happy / enjoy when they are

part of movement activities. (UNESCO., 2015) UNESCO identified that physical literacy is one of the most important foundations in developing quality sports and education programs. Even in some countries, it has made a policy in encouraging and supporting the concept of physical literacy to be part of physical education programs such as in America and Canada. (Ontario Ministry of Education, 2019), the Australian state promotes the development of physical literacy into the sports secretariat and even this policy has an impact on the development of physical education curricula in Australia (Scott et al., 2021), even (Landi et al., 2021) doing a reflection of physical literacy in physical education programs in America.

Studies related to *physical literacy* have been widely carried out in several countries, such as those that have been carried out by (Landi et al., 2021) revealed that physical literacy is one of the concepts in the development of physical education programs in the curriculum of physical education in Australia, explained that sport new Zealand and assisted by regional sport trusts created/drafted policy regulations related to the adoption of physical *literacy* in New Zealand to be implemented by all people working in the sports sector, one of which is in the physical education sector in all schools in New Zealand. Another research related to physical literacy is talking about the measurement of physical literacy (Farren et al., 2021); (M. Tremblay & Lloyd, 2010), (Graham et al., 2016), (Yi et al., 2020) conduct research on the direction of physical literacy education based on public perceptions. Even studies related to physical literacy have been widely carried out in Indonesia, as has been done by (gita febria friskawati, 2022), Where in his research examines the perceptions of early childhood education teachers in urban and rural areas related to physical lietration besides that it is still in the same research talking more about focusing more on the differences in perceptions of physical education teachers related to *physical literacy* in terms of age, teaching experience and educational background. Another research conducted by (Suherman, 2020) revealed the integration of physical *literacy* in physical education programs in the learning curriculum in Indonesia, especially in the 2013 curriculum, (Bulqini et al., 2021) Speaking of physical *literacy* is the most powerful potential to be integrated into the physical education curriculum. Another thing still speaks about the impact of the implementation of traditional games on the physical literacy skills of students (Gustian, 2020); and (Hanafi et al., 2020) junior high school students in Gorontalo, then (Rihatno & Nuraini, 2021) the formation of physical literacy by utilizing mobile learning during the Covid-19 period (Rihatno & Nuraini, 2021) From several studies that have been carried out related to physical literacy, it has not been proven that there are research results related to the achievement of physical *literacy* in students as a result of the

implementation of physical education games (P.E.G) based on *fundamental movement patterns* integrated with *physical education* programs in the independent curriculum in Indonesia. So the purpose of this study is to see the results of the implementation of physical education *games* (P.E.G) based on fundamental *movement patterns* resulting from the development process integrated with physical education programs in the independent curriculum in Indonesia towards the formation of *physical literacy*.

METHODS

The research method used in this study is the ADDIE Development Method which consists of five stages, namely: (1) analysis, (2) *design*, (3) *development*, (4) *implementation*, and (5) *evaluation*. (Anam & Scesiarriya, 2020). The number of samples in this study was 29 people consisting of 14 male students (average age ± 8 years) and 15 female students (average age ± 8 years) with the technique used in determining the number of samples, namely using saturated sampling techniques. The reason for taking samples using this technique is because the author believes that the quality of the development model created is right on target and in accordance with the characteristics of the sample taken, namely for early childhood ages. The variety of basic motion-based games was carried out in June precisely at the time of independent curriculum-based learning. The instrument used is *the physical literacy questioner*. Data analysis used is by using percentage analysis to the feasibility of the product while to see the influence of the application of basic motion-based game variations on improving physical literacy, namely using *paired simple t-test* analysis.

RESULTS AND DISCUSSION

The research was conducted by following the steps of research and development with ADDIE. The results of this study are:

a. Analysis

The first stage that is carried out is by carrying out the identification process of several aspects which will later lead to the birth of a product. The identification process carried out is as follows:

Table 1. Results of Studies at the Analysis Stage

No	Identification	Result of Identification
1.	Curriculum Analysis	The curriculum, which is implemented starting in 2019-2022, has several curricula including the 2013 curriculum, the darutat curriculum and the independent curriculum. During the Covid-19 period, schools were encouraged to implement an emergency curriculum where at that time students carried out online learning from home and even the government issued a policy to simplify the 2013 curriculum which aimed to ensure that learning activities could still be carried out even during the Covid period, even the PJOK learning achievements / objectives at that time focused more on the resilience of the fitness aspects of the students during the Covid-19 period. Then the end of the Covid-19 period and the end of the online learning period, precisely in 2021 the government launched an independent curriculum with learning outcomes including from PJOK learning students are able to be physically literate, increase basic movement skills and physical fitness of students.
2.	Analysis of Student Characteristics	In general, the students of Public Alementary School 025 Cikutra belong to the alpha generation. The alpha generation is children born in 2010-2025. Generally, the characteristics of this gene master technology, have strong thoughts and opinions, and do not like to be restricted by rules. However, dilihat in detail the characteristics of the students of Public Alementary School 025 Cikutra there are those who like to move, love to play, like to imagine and work, like to do things directly, like to be in groups. However, judging by nature, the children are not crybaby or spoiled, have a little good motor, are strong, enthusiastic but lacking in academic terms and often laze because they are often cool playing gudget after school and forget to do activities, especially the lack of movement activities.
3.	Need Analysis	Online learning carried out during the Covid-19 period is quite influential on movement activities carried out by students during learning during the Covid-19 period, especially in PJOK learning and after the online learning period has stopped considering that there is a policy that schools are allowed to resume face-to-face learning. seeing the situation that has begun to change, it turns out that PJOK learning finds new problems where students must be encouraged to want to adapt again to motion learning which has not been carried out optimally, besides that PJOK learning carried out in this face-to-face period must be able to encourage students to want to be fully involved in learning, therefore to encourage students to want to return to doing movement activities, it is necessary to have game activities that combined with various movement activities in schools so that students are encouraged and re-explored their movement potential.

b. Design

In the *design* process of the PE games model, the researcher sketched the design of the PE Games Module in the form of a design overview. Then this model was continued when it was improved and modified using the Canva application and also the researcher made an expert assessment design instrument.

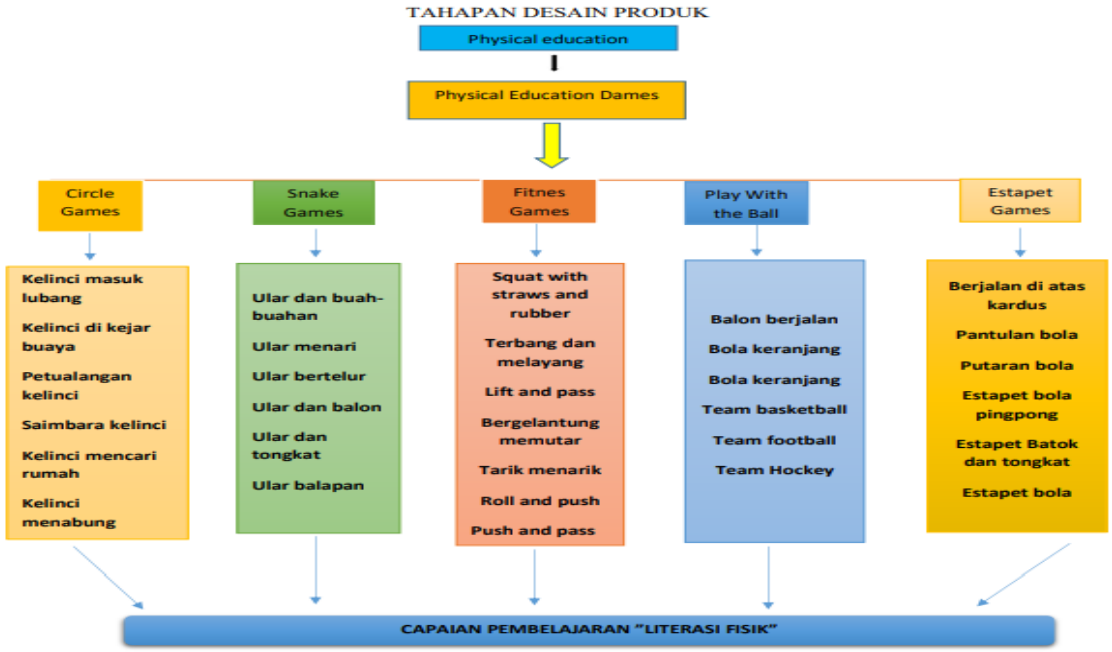

Figure 1. *Phyical Education Games Model* Stage Design*(P.E.G)*

c. Developing

The development stage of the PE games model is a development model for Physical Education Games for early childhood, created as a guide and their steps in carrying out movement activities both in sports activities at school and outside of school. This model is made according to the needs and characteristics of elementary school children so that children are able to carry out and understand the games they will perform to improve basic movements. In the assessment process of the Physical Education Games Model, feasibility tests are carried out by experts in the field of games, the field of learning models, the field of physical learning, the field of games in sports and expert teachers who are currently reviewing the results of the feasibility of products that have been co-produced as follows :

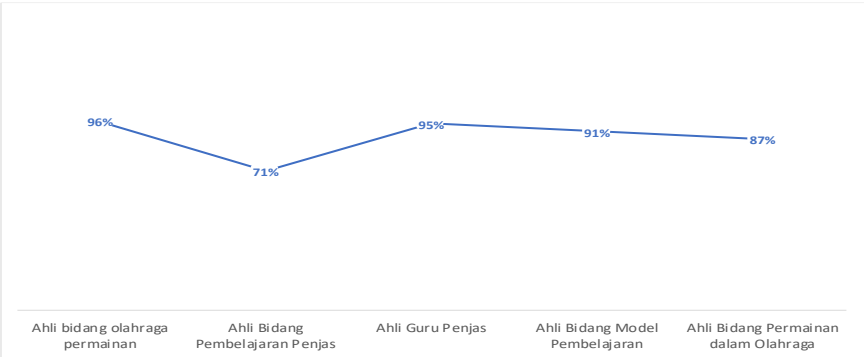

Figure 2. Physical Education Games Model Reliability Test Results by Expert

The following are the average assessment results from four experts in the field of games, experts in the field of learning models, experts in the field of learning education penjas, experts in the field of games in sports, and experts in the field of physical education. The results of the study at SDN 025 Cikutra with a total sample of 29 grade V students before the researcher went to the field using a questioner feasibility test by experts on the physical education games model using percentages. The results of the development of physical education games with basic movement in the learning of physical education to improve the physical literacy of children aged 7-9 years are in the "Good" category with a presentation rate of 88%, from 5 experts, namely experts in the field of sports games with 96% results, experts in the field of learning models obtained 91% results, experts in the field of learning education penjas obtained results 71%, experts in the field of games in sports obtained results 87%, and expert teacher assessment obtained 95% with a total amount of 88%. This means that this game model can be used in the field such as silva theory and lunt games are tools used by children to fulfill the instinct of play (Guslinda & Kurnia, 2018).

4. Implementation

The next stage in the ADDIE development method is to implement the resulting product, at this stage the design used is *pre test post test desain, the following are the results of calculating the results of the implementation of the PAG model :*

Table 2. Hypotesis test

One-Sample test					
Test Value = 0					
	t	df	Sig.(2-Tailed)	Mean Diffrence	95% Confidence Interval of The Difference
				Lower	Upper
Pre post test	45.468	28	.000	27.792	30.415

Based on the table above, it is known that the average score results of the initial test and the final test are 29,103, the standard deviation is 3,447, the t-score is 45.46 and the significance level is .000 <.0.05. This means that the physical *education games* model in the form of 30 game variations can improve physical literacy skills in children aged 7-9 years

5. Evaluating

Seeing the results of the evaluation stage, the results of the research were obtained, namely that students' *physical literacy* skills can be improved through the implementation (*P.E.G)* based on *fundamental movement patterns*. This is in line with what was revealed by (Yli-Piipari S, Gråstén A, Huhtiniemi M, 2020) that *Physical literacy* can be obtained from the existence of game activities that are thick with elements of physical activity that are carried out in a structured and programmatic manner, even (Bassett et al., 2013) revealed that a game that is identic with various *motoric* games will have an impact on the formation of abilities *physical literacy*, (Holfelder & Schott, 2014) explained that the achievement of physical *literacy* is obtained from the contribution of student participation in various physical activities in the form of basic movement skills that are carried out systematically and programmatically. (Barnett LM, van Beurden E, Morgan PJ, 2009) revealed that the physical *literacy* ability possessed by each individual is not only obtained from one type of physical activity but also from various types of physical activity.

Other studies state that a person's ability in physical *literacy* and fitness is not only obtained from physical activity in physical education programs in their schools but also additional physical activity activities outside of activities carried out at school. (W. Chen et al., 2018), (Kalaja et al., 2010) explained that the *ability of physical literacy* in an individual can increase due to physical activity carried out with various levels of intensity.

A teacher must realize that the achievement of physical literacy in a child at the beginning of growth, especially in the elementary school phase, begins with the contribution of various, structured and comprehensive basic movement activities, although basically the development of a person's movements can change and develop according to the process of learning stages motion (Durden-Myers et al., 2018), the movement potential that occurs in a person will develop as a result of the interaction between humans and the environment through various physical activities (Donaldson et al., 2022).

As we know that physical literacy can be interpreted, namely motivation, self-confidence, physical competence and knowledge that will be involved in life display (M. S. Tremblay, Longmuir, et al., 2018), (M. S. Tremblay, Costas-Bradstreet, et al., 2018). (Shearer et al., 2021) revealed that physical literacy is the foundation of skills in the form of cognitive, affective, behavioral, fitness aspects, characteristics that a child needs to have and develop in order to be able to receive benefits and take part or play an active role in various physical activities that can have an impact on the element of lifelong pleasure. Even physical literacy is part of the final achievement in physical education learning carried out in schools (Suntoda et al., 2021); (A. Chen, 2015), (Brown et al., 2020) shows that *physical literacy* has a role in shaping the various physical activity abilities carried out by children as early as possible. There are 2 things that a teacher does to support the achievement of physical literacy firstly, namely the need for a learning approach and second, a teacher must examine pedagogical practices based on physical literacy in order to be able to integrate with physical education programs in schools (Uljas et al., 2022).

For this reason, looking at and studying the importance of physical literacy for children, it seems necessary to create a new policy in each school so that this program is included and can be integrated into the school curriculum. No matter how technical it is, schools need to make efforts for their students to be literate in terms of physical literacy, because it has been explained that one of the indicators of physical literacy is the frequency of doing physical activity, and several studies have mentioned how important physical activity is for a person, not only does it have an impact on increasing ability. physical, but also cognitive and mental improvement (Biddle et al., 2019; de Greeff et al., 2018; Howie & Pate, 2012).

CONCLUSION

In the final part of this study, the researcher explained the conclusions that can be drawn based on the results of the study. Based on the results of the study, it can be concluded that the Development of Basic Motion-Based Game Variations can Improve the Physical Literacy ability of Children Aged 7-9 Years 27%. As for the recommendations given that can be implemented, namely seeing the importance of physical *literacy* skills to be possessed by each individual as early as possible so that they are able to carry out various physical activities, then the action that can be done is to maximize the implementation of physical education programs in the independent curriculum, one of which is by implementing various variations of basic motion-based games in PJOK learning both at the beginning, learning activities or at the end of core learning activities.

REFERENCES

Anam, A. S., & Scesiarriya, V. M. (2020). Pengembangan Permainan Hadang Motorik untuk Materi Keterampilan Gerak Dasar di MI Yapendawa Bendorejo. *PENJAGA : Pendidikan Jasmani & Olahraga*, *1*(1), 12–15.

Bailey, R., Armour, K., Kirk, D., Jess, M., Pickup, I., & Sandford, R. (2009). The educational benefits claimed for physical education and school sport: An academic review. *Research Papers in Education*, *24*(1), 1–27. https://doi.org/10.1080/02671520701809817

Barnett LM, van Beurden E, Morgan PJ, et al. (2009). Childhood motor skill proficiency as a predictor of adolescent physical activity. *Journal of Adolescent Health*, *44*(3), 252–259.

Bassett, D. R., Fitzhugh, E. C., Heath, G. W., Erwin, P. C., Frederick, G. M., Wolff, D. L., Welch, W. A., & Stout, A. B. (2013). Estimated energy expenditures for school-based policies and active living. *American Journal of Preventive Medicine*, *44*(2), 108–113. https://doi.org/10.1016/j.amepre.2012.10.017

Biddle, S. J. H., Ciaccioni, S., Thomas, G., & Vergeer, I. (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. *Psychology of Sport and Exercise*, *42*(August), 146–155. https://doi.org/10.1016/j.psychsport.2018.08.011

Brown, D. M. Y., Dudley, D. A., & Cairney, J. (2020). Physical literacy profiles are associated with differences in children's physical activity participation: A latent profile analysis approach. *Journal of Science and Medicine in Sport*, *23*(11), 1062–1067. https://doi.org/10.1016/j.jsams.2020.05.007

Bulqini, A., Puspodari, P., Arfanda, P. E., Suroto, S., & Mutohir, T. C. (2021). Physical Literacy in Physical Education Curriculum. *ACTIVE: Journal of Physical Education, Sport, Health and Recreation*, *10*(2), 55–60. https://doi.org/10.15294/active.v10i2.47008

Chen, A. (2015). Operationalizing physical literacy for learners: Embodying the motivation to move. *Journal of Sport and Health Science*, *4*(2), 125–131. https://doi.org/10.1016/j.jshs.2015.03.005

Chen, W., Hammond-Bennett, A., Hypnar, A., & Mason, S. (2018). Health-related physical fitness and physical activity in elementary school students. *BMC Public Health*, *18*(1), 1–13. https://doi.org/10.1186/s12889-018-5107-4

Coe, D. P., Pivarnik, J. M., Womack, C. J., Reeves, M. J., & Malina, R. M. (2012). Health-related fitness and academic achievement in middle school students. *Journal of Sports Medicine and Physical Fitness*, *52*, 654–660.

Corbin, C. B. (2016). Implications of Physical Literacy for Research and Practice: A Commentary. *Research Quarterly for Exercise and Sport*, *87*(1), 14–27. https://doi.org/10.1080/02701367.2016.1124722

de Greeff, J. W., Bosker, R. J., Oosterlaan, J., Visscher, C., & Hartman, E. (2018). Effects of physical activity on executive functions, attention and academic performance in preadolescent children: a meta-analysis. *Journal of Science and Medicine in Sport*, *21*(5), 501–507. https://doi.org/10.1016/j.jsams.2017.09.595

Donaldson, G. D., Sheehan, D. P., & Katz, L. (2022). Physical Literacy Vindicated: The Mind Is the Function of a Body Embedded Brain. *Advances in Physical Education*, *12*(02), 142–160. https://doi.org/10.4236/ape.2022.122011

Durden-Myers, E. J., Green, N. R., & Whitehead, M. E. (2018). Implications for promoting physical literacy. *Journal of Teaching in Physical Education*, *37*(3), 262–271. https://doi.org/10.1123/jtpe.2018-0131

Fadilah, R., Parinduri, S. A., Syaimi, K. U., & Suharyanto, A. (2020). Islamic Guidance and Counseling to Overcome the Study Difficulty of Junior High School Students in SMP IT Nurul Azizi Medan (Case Study of Students experiencing Anxiety). *International Journal of Psychosocial Rehabilitation*, *24*(Special Issue 1), 1154–1160. https://doi.org/10.37200/ijpr/v24sp1/pr201262

Farren, G. L., Yeatts, P. E., & Price, B. (2021). Measuring physical literacy and its association with interscholastic sports intention in sixth-grade physical education students. *Journal of Physical Education and Sport*, *21*(6), 3344–3355. https://doi.org/10.7752/jpes.2021.06454

Gita febria friskawati. (2022). Perceived Physical Literacy of Kindergarten Teachers in Urban and Rural Areas. *Jurnal Pendidikan Dan OlahragaJasmani Dan Olahraga*, *7*(1), 104–109.

Graham, G., Manross, M., Hopple, C., & Sitzman, T. (2016). Novice and Experienced Children's Physical Education Teachers: Insights into Their Situational Decision Making. *Journal of Teaching in Physical Education*, *12*(2), 197–214. https://doi.org/10.1123/jtpe.12.2.197

Guslinda, & Kurnia, R. (2018). Media Pembelajaran Anak Usia Dini. In *Media Pembelajaran*.

Gustian, U. (2020). Permainan tradisional: suatu pendekatan dalam mengembangkan physical literacy siswa sekolah dasar. *Jurnal SPORTIF : Jurnal Penelitian Pembelajaran*, *6*(1), 199–215. https://doi.org/10.29407/js_unpgri.v6i1.14252

Hanafi, S., Asmawi, M., Dlis, F., OF, H. S.-J.-J., & 2020, undefined. (2020). the Physical Literacy First Student School (Smp) 2019 At City of Gorontalo. *Journal.Unj.Ac.Id*, *6*(1), 13220.

Holfelder, B., & Schott, N. (2014). Relationship of fundamental movement skills and physical activity in children and adolescents: A systematic review. *Psychology of Sport and Exercise*, *15*(4), 382–391. https://doi.org/10.1016/j.psychsport.2014.03.005

Howie, E. K., & Pate, R. R. (2012). Physical activity and academic achievement in children: A historical perspective. *Journal of Sport and Health Science*, *1*(3), 160–169. https://doi.org/10.1016/j.jshs.2012.09.003

Hulteen, R., Morgan, P., Barnett, L., Stodden, D., & Lubans, D. (2017). The Role of Movement Skill Competency in the Pursuit of Physical literacy: Are Fundamental Movement Skills the only Pathway? *Journal of Science and Medicine in Sport*, *20*(3), 77–89.

Janssen, I., & LeBlanc, A. G. (2010). Systematic review of the health benefits of physical activity and fitness in school-aged children and youth. *International Journal of Behavioral Nutrition and Physical Activity*, *7*. https://doi.org/10.1186/1479-5868-7-40

Juditya, S. (2018). *GERAK DASAR LAY UP SHOOT PADA SISWA MELALUI PENERAPAN MODEL PSI (PERSONALIZED SYSTEM INTRACTION) Penelitian ini bertujuan untuk mengetahui pengaruh sebelum dan sesudah diterapkannya Model Personalized System Intraction dengan menggunakan modul bergambar*. *2*(November), 71–80.

Kalaja, S., Jaakkola, T., Liukkonen, J., & Watt, A. (2010). Fundamental movement skills and motivational factors influencing engagement in physical activity. *Perceptual and Motor Skills*, *111*(1), 115–128. https://doi.org/10.2466/06.10.25.PMS.111.4.115-128

Kemendikbudristek nomor 008/H/KR/2022. (2022). *Capaian Pembelajaran PAUD Dikdasmen pada kurikulum merdeka* (Issue 021).

Landi, D., Blackshear, T. B., Mcfadden, C., & Blackshear, T. B. (2021). SHAPE America and physical literacy : an event horizon ? SHAPE America and physical literacy : an event horizon ? *Curriculum Studies in Health and Physical Education*, *0*(0), 1–17. https://doi.org/10.1080/25742981.2021.1908835

Liu, Y., & Chen, S. (2021). Physical literacy in children and adolescents: Definitions, assessments, and interventions. *European Physical Education Review*, *27*(1), 96–112. https://doi.org/10.1177/1356336X20925502

Manalu, J. B., Sitohang, P., Heriwati, N., & Turnip, H. (2022). Prosiding Pendidikan Dasar Pengembangan Perangkat Pembelajaran Kurikulum Merdeka Belajar. *Mahesa Centre Research*, *1*(1), 80–86. https://doi.org/10.34007/ppd.v1i1.174

Ontario Ministry of Education. (2019). *T H E O N Ta R I O C U R R I C U L U M Health and Physical*.

Pradana, A. A. (2021). Strategi Pembentukan Karakter Siswa Pada Jenjang Pendidikan Dasar Melalui Mata Pelajaran Pendidikan Jasmani Olahraga Dan Kesehatan. *PREMIERE : Journal of Islamic Elementary Education*, *3*(1), 78–93. https://doi.org/10.51675/jp.v3i1.128

Prianti, D. (2022). Analisis Kurikulum Merdeka dan Platform Merdeka Belajar untuk Mewujudkan Pendidikan yang Berkualitas. *Jurnal Penjaminan Mutu*, *8*, 238–244.

Rasnita, R. M., Triansyah, A., & Hidasari, F. P. (2021). Pengaruh permainan tradisional terhadap physical literacy siswa menengah pertama. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, *10*(12), 1–8.

Rihatno, T., & Nuraini, S. (2021). Children's physical literacy development needs using mobile learning. *Journal of Physical Education and Sport*, *21*(4), 2395–2401. https://doi.org/10.7752/jpes.2021.s4321

Scott, J. J., Hill, S., Barwood, D., & Penney, D. (2021). Physical literacy and policy alignment in sport and education in Australia. *European Physical Education Review*, *27*(2), 328–347. https://doi.org/10.1177/1356336X20947434

SHAPE National Standards for K-12 Physical Education. (2013). *Society of Health and Physical Educators*.

Shearer, C., Goss, H. R., Boddy, L. M., Knowles, Z. R., Durden-Myers, E. J., & Foweather, L. (2021). Assessments Related to the Physical, Affective and Cognitive Domains of Physical Literacy Amongst Children Aged 7–11.9 Years: A Systematic Review. *Sports Medicine - Open*, *7*(1). https://doi.org/10.1186/s40798-021-00324-8

Sport Australia. (2020). *Physical Literacy in Children Questionnaire*. 1–117.

Suherman, W. S. (2020). *Integrating Physical Literacy into Indonesian Physical Education Curriculum*. *1*, 224–227. https://doi.org/10.5220/0009309302240227

Suntoda, A., Anira, A., Nugroho, W. A., & Wibowo, R. (2021). Physical Literacy Assessment of Elementary School Children in Indonesian Urban Areas. *TEGAR: Journal of Teaching Physical Education in Elementary School*, *5*(1), 76–83. https://doi.org/10.17509/tegar.v5i1.41072

Tremblay, M., & Lloyd, M. (2010). Physical Literacy Measurement - The Missing Piece. *Physical & Health Education Journal*, *76*(1), 26–30.

Tremblay, M. S., Costas-Bradstreet, C., Barnes, J. D., Bartlett, B., Dampier, D., Lalonde, C., Leidl, R., Longmuir, P., McKee, M., Patton, R., Way, R., & Yessis, J. (2018). Canada's Physical Literacy Consensus Statement: process and outcome. *BMC Public Health*, *18*(S2), 1–18. https://doi.org/10.1186/s12889-018-5903-x

Tremblay, M. S., Longmuir, P. E., Barnes, J. D., Belanger, K., Anderson, K. D., Bruner, B., Copeland, J. L., Delisle Nyström, C., Gregg, M. J., Hall, N., Kolen, A. M., Lane, K. N., Law, B., MacDonald, D. J., Martin, L. J., Saunders, T. J., Sheehan, D., Stone, M. R., & Woodruff, S. J. (2018). Physical literacy levels of Canadian children aged 8-12 years: Descriptive and normative results from the RBC Learn to Play-CAPL project. *BMC Public Health*, *18*(Suppl 2). https://doi.org/10.1186/s12889-018-5891-x

Uljas, L., Valtonen, J., Autio, O., & Ruismäki, H. (2022). Supporting physical literacy: a case study of preservice classroom teachers' perceptions. *Journal of Physical Education and Sport*, *22*(9), 2069–2075. https://doi.org/10.7752/jpes.2022.09264

UNESCO. (2015). *Quality Physical Education (QPE) Guidelines For Policy-Makers.* UNESCO Publisher.

Whitehead M. (2010). *Physical Literacy Throughout the Life Course*. Routledge, Taylor & Francis Group.

Yi, K. J., Cameron, E., Patey, M., Loucks-Atkinson, A., Loeffler, T. A., Sullivan, A. M., McGowan, E., Borduas, C., & Buote, R. (2020). Future directions for physical literacy education: Community perspectives. *Journal of Physical Education and Sport*, *20*(1), 123–130. https://doi.org/10.7752/jpes.2020.01016

Yli-Piipari S, Gråstén A, Huhtiniemi M, et al. (2020). .Predictive strength of physical education -centered physical literacy indicators on physical activity. *Journal of Teaching in Physical Education Ahead of Print*.