

An Assessment of Physical Literacy of Playfun Among School Going Children's

Ramesha K D¹, Dr. Shashidhar Kellur²

¹Research Scholar Dept. of Physical Education and Sports Science Vijayanagara Sri Krishandevaraya University, Ballari

²Assistant Professor Dept. of Physical Education and Sports Science Vijayanagara Sri Krishandevaraya University, Ballari

Abstract

The purpose of the study was to assess the physical literacy of PLAYfun variables among school-going children. Physical literacy assessment for youth (PLAYfun) is a measure of Assessment variables of Running, Locomotor, Object control-upper body, Object control-lower body, and Balance, stability& body control of school students. **Method:** In this study, samples were selected randomly from the 7 to 14 years age group, a total of 10 Subjects in this study. children were assessed using the "PLAY tool". **Result:** We used SPSS software to analyze the data, measuring the Mean, Median and Standard Deviation, of all PLAYfun Five domains and 18 tasks. Based on the analyzed data the following results of mean total score is **34.85, indicating the Low level of physical literacy** in this group. The median total score (**38.025**) is close to the mean, suggesting that the data is relatively symmetrical. The standard deviation of **10.45** indicates the level of dispersion around the mean value.

Keywords: Physical Fitness, Physical Literacy, Youths, child's, Motor competence, Elementary school, Locomotor etc.

INTRODUCTION

In the present era, Physical literacy is very important Its importance is not limited to physical and mental health, and well-being, and also Physical literacy can help children and youth develop physical fitness, mental health, emotional adjustment, and overall development. Just as we measure the level of literacy in many aspects e.g., educational, financial, development, marketing, etc., many plans are made to develop it by understanding its level. Similarly, measuring the level of physical literacy is a very important factor in the present era because it has a great impact on the overall development of children and the level of basic motor skills of children and youth can be known through physical literacy. Likewise, helps to measure and improve the physical literacy of physical education teachers, physical fitness trainers, sports trainers, sports coaches, and parents. we developed children's game skills, physical exercises, and physical activities, all of the above factors can be measured We used a PLAY tool and measured the level of physical literacy. Physical literacy is important for the development of children's physical ability, cardiovascular ability, metabolic ability, muscle ability, musculoskeletal ability, and mental ability, all of these can be developed and being physically literate reduces stress, anxiety, and fatigue. Overall, in today's era, physical literacy is very important to understand Physical literacy in the current era to empower children, youth, and adults to be healthy and develop sports skills.

For a while now the term "physical literacy" "The most recent champion of PL, Margaret Whitehead, and the IPLA (2017) offers a more detailed definition as "the motivation, confidence, physical competence, knowledge and understanding to value and take responsibility for engagement in physical activities in life." And PLAY means physical literacy assessment for youth. This tool is full of workbooks, forms, Questions, score sheets, and assessment scales and explains how to assess physical literacy in children and youth. PLAYfun offers an assessment of the primary movement skills performed by the youth. The actual tool consists of eighteen activities full of physical abilities. Each task is graded on a four-point rating system with the following categories: Initial Emerging, Competent, and Proficient.

Statement of the problem

"The study's main purpose was to "An Assessment of Physical Literacy of PLAYfun Among School Children's- a Pilot study".

Delimitations:

1. The study was delimited to the 7 to 14 Age group only.
2. The study assesses physical literacy by selecting only the PLAY tool.
3. The study was delimited to Ballari Taluk only
4. The study was delimited to school-going children only
5. The study was delimited to a total of 10 Subjects from Shri Visvesvaraya Higher Primary School, Ballari, only

Limitations:

1. The researcher had no control over the food habits, health, and lifestyle of the subjects involved in the study.
2. The researcher had no control on the daily schedule at home, school and also on their extracurricular activities.
3. The researcher had no control on genetic and environmental influences.

Objectives of the study:

1. Design and implement an assessment program that shall support educators or trainers engaged in teaching young children and youths.
2. To assess physical literacy self-perception in children and determine changes post-intervention.
3. **Physical literacy is essential to every child's development of ex:** Reduced Risk of Obesity, Spatial Awareness, Academic Attainment, Improved Confidence, Love of Sports, More Happiness, Coordination, and Response Time. Etc

Selection of the subject:

The main purpose of the study was to find out the " Physical Literacy of PLAYfun Among School-Children of Ballari a Pilot study" To achieve this there was a total of 10 School-Going Children's were Selected Randomly from Shri Visvesvaraya Higher Primary School (Best School) School Located in Ballari District.

Selection of the tool:

In this study, Researcher used a standardised assessment tool, the Physical Literacy Assessment for Youth (PLAY), instruments will be used to describe the physical literacy of children (Sport for Life, 2014). PLAY tools were developed at the University of Manitoba in 2009-2010 and released to Canadian Sport for Life in 2012. These tools are appropriate for aged 7 and older children. PLAY tools were consistently designed as research evaluation tools for physical literacy and are appropriate with a physical literacy model.

Selection of the Assessment Variables:

In this study, I have used the PLAY tool in this physical literacy assessment for youth assessing PLAYfun, only and for a total of 5 subsections and 18 tasks.

Table No: 1 Selection of the Variables

Sl. No	Tool	PLAY Tools	Subsection	Task
1	P L A Y T O O L	PLAYfun	Running	<ol style="list-style-type: none"> 1. Run a square 2. Run there and back 3. Run, jump, then land on two feet
			Locomotor	<ol style="list-style-type: none"> 4. Crossovers 5. Skip 6. Gallop 7. Hop 8. Jump
			Object Control- Upper Body	<ol style="list-style-type: none"> 9. Overhand throw 10. Strike with stick 11. One-handed catch 12. Hand dribble stationary and moving
			Object Control- Lower Body	<ol style="list-style-type: none"> 13. Kickball 14. Foot dribble moving forward
			Balance, stability & body control	<ol style="list-style-type: none"> 15. Balance walk(hell-to-toe) forward 16. Balance walk(toe-to-hell) forward 17. Drop to the ground and back up 18. Lift and Lower

Data Collection and Measures

Measures

The PL of the children was assessed using the PLAY tool. This tool is open-source and available online. it was developed by the University of Manitoba the PLAY tool includes a total 6 collections of tools this study used PLAYfun, an assessment of motor competence, confidence, and comprehension of 18 fundamental movement skills, and PLAYfun comparison of a collection of 18 different movement tasks within five domains this movement task measures physical literacy individuals 7 yr and older. five domains assess an individual’s different child’s movement skills. The five domains and 18 tasks are shown the Table 1.

A 100 mm-long VAS is used to evaluate children, and it is separated into four groups: initial (0–25 mm), emerging (25–50 mm), competent (50–75 mm), and proficient (75–100 mm). While the competent and proficient categories show that a skill has been learned, the beginning and emerging categories show that

a child is still learning the skill. After deciding which group the kid belongs to, the assessor marks the child's proficiency for the given job by placing an "X" inside the 25-mm box of the category. An individual who has just learned a particular ability, for instance, may be positioned at the lower end of the competent group, whereas someone who exhibits a higher degree of competence would be positioned higher in that category. A high degree of skill-specific training through sports or other activities (e.g., dancing, gymnastics, aerobics etc.) is usually possessed by those in the skilled group. For each of the 18 jobs, there are comprehensive examples for each category in the PLAYfun training handbook. The scale is not criterion-based; rather, it is a comprehensive rubric. The 100-mm scale is used to represent all individuals, regardless of age, rather than scoring children about other kids their age. "The very best anyone could be at the skill regardless of age" is the definition of the highest score, or 100. A ruler is used to measure from the beginning of the scale (i.e., developing) to the middle of the "X" to get the score for each assignment. Each assignment is therefore assigned a score between 0 and 100. The sum of the scores from each of the 18 tasks makes up the total score, while the sum of the scores from the tasks that are part of the domain makes up the domain scores. For example, as shown the Tables 2 and 3.

Collation of Data

Before I go to the collation of data have taken the help of three Trained Research Experts for the collation of data. Subjects get a broad set of instructions before the assessment begins, explaining that they will be required to do a variety of exercises and that they should make every effort to perform as best they can. Before each talent is executed, the players are given a brief explanation (for example, "I want you to run a square around the pylons"). Do your best to run a square, please. Are you ready? "Run now"); subjects are not given any skill modelling. Each of the 18 activities requires a single attempt from each player, and the entire evaluation needs each participant to do around 15 minutes.

Analysis

We used SPSS software to analyse the data, measuring the mean, median and Standard deviation of all PLAYfun Five domains and 18 tasks.

Table No: 2 PLAYfun Variables School-going Children’s Individual PLAYfun Score

Student Name	Running	Locomotor	Object Control-Upper Body	Object Control-Lower Body	Balance, Stability & Body Control	Subtotal	Total Score (Subtotal/18)
Bharath Kumar	85	175	110	90	110	570	31.67
G Pawan Kumar	42	85	118	30	45	320	17.78
Yogish	163	175	132	50	190	710	39.44
Prashanth K	155	207	240	85	235	922	51.22
Raja Kumar K	40	80	102	80	125	447	24.83
Mehit K	155	160	262	75	212	864	48.00
Prajwal M	145	239	162	88	56	690	38.33
Vardan N	173	101	173	70	162	679	37.72
Shreyas N	125	143	250	65	121	704	39.11

Yuvaraja P	24	115	125	20	83	367	20.39
------------	----	-----	-----	----	----	-----	--------------

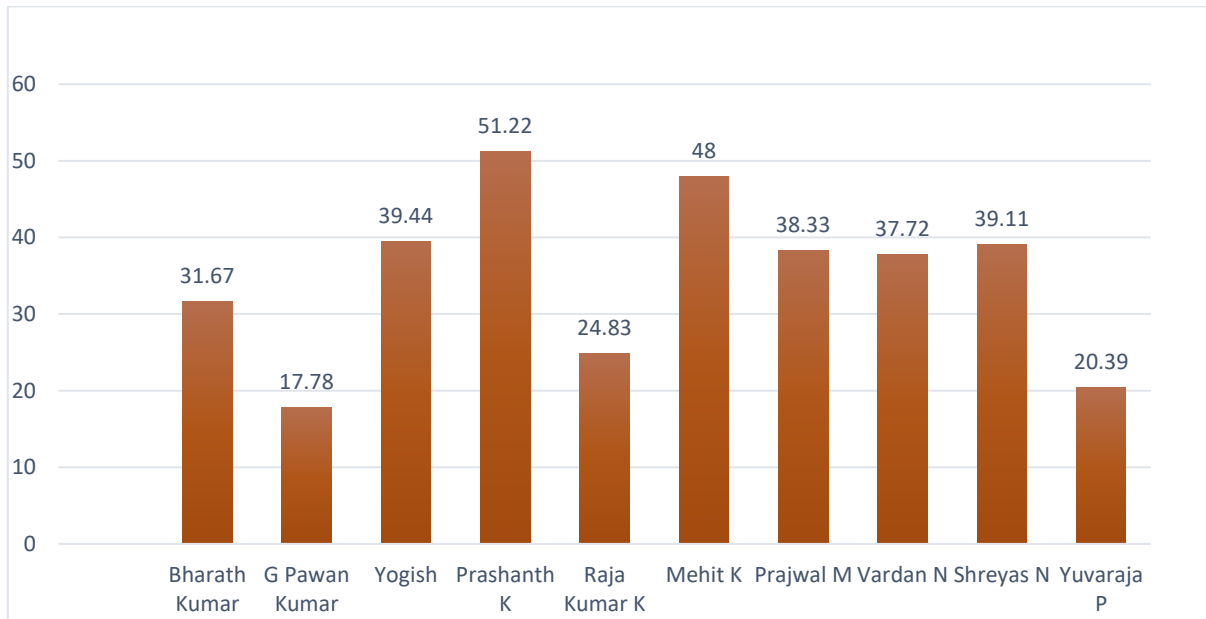


Figure:1 PLAYfun Variables of School-going Children's Individual PLAYfun Score

Table No: 3 Descriptive Statistics of PLAYfun Variables Among School-Going Children's''

PLAYfun Variables	Mean	Median	Standard Deviation	Min	Max	Range
Running	110.7	135	54.38	24	173	149
Locomotor	141	151.5	52.89	80	239	159
Object Control Upper Body	167.4	147	61.26	102	262	160
Object Control Lower Body	65.3	72.5	25.04	20	90	70
Balance, Stability & Body Control	133.9	123	60.18	45	235	190
Subtotal	621.3	684.5	188.19	320	922	602
Total Score (Subtotal/18)	34.85	38.025	10.45	17.78	51.22	33.44

Interpretation:

- Running:** The mean, Median, and Standard Deviation of PLAYfun Variables of running for school-going children are 110.7, 135, and 54.38, respectively.
- Locomotor:** The mean, Median and Standard Deviation of PLAYfun Variables of Running for school-going children are 141, 151.5, and 52.89, respectively.
- Object Control Upper Body:** The mean, Median and Standard Deviation of PLAYfun Variables of Running for school-going children are 167.4, 147, and 61.26, respectively
- Object Control Lower Body:** The mean, Median and Standard Deviation of PLAYfun Variables of Running for school-going children are 65.3, 72.5, and 25.04, respectively
- Balance, Stability & Body Control:** The mean, Median and Standard Deviation of PLAYfun Variables of Running for school-going children are 133.9, 123, and 60.18, respectively

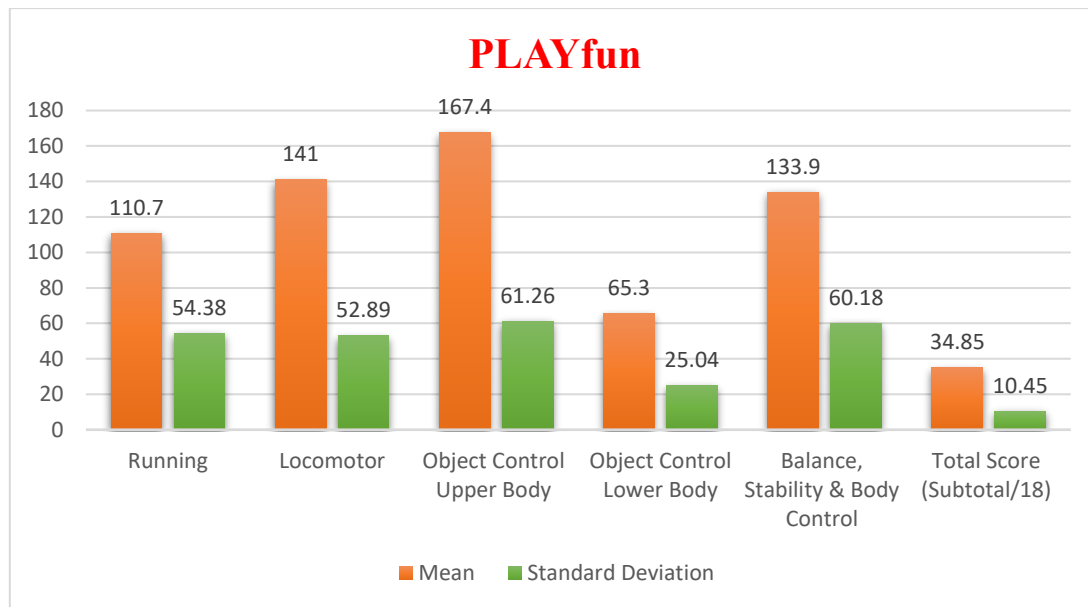


Figure: 2 The mean value and Standard Deviation of PLAYfun Five Domains of School Going Children's"

The mean total score is **34.85**, indicating a **Low level of physical literacy** in this group. The median total score (38.025) is close to the mean, suggesting that the data is relatively symmetrical. The standard deviation of 10.45 indicates the level of dispersion around the mean. The large range shows a wide variety of physical literacy in the group. This statistical table and the summary statistics provide a clearer picture of the PLAYfun physical literacy scores for the students.

Conclusion

The study aimed to compare the assessment of PLAYfun variables in school-going children. the PLAYfun variables included Running, Locomotor, Object control-upper body, Object control-lower body, and Balance, stability& body control. based on the analysed data, the following conclusions of the mean total score is 34.85, indicating the average level of physical literacy in this group.

References

1. Whitehead 1, M. (2001). The concept of physical literacy. *European Journal of Physical Education*, 6(2), 127-138.
2. Whitehead, M. (2013). Definition of physical literacy and clarification of related issues. *Icsspe Bulletin*, 65(1.2).
3. Edwards, L. C., Bryant, A. S., Keegan, R. J., Morgan, K., & Jones, A. M. (2017). Definitions, foundations, and associations of physical literacy: a systematic review.
4. <https://play.physicalliteracy.ca/>
5. Kriellaars, D. J., Cairney, J., Bortoleto, M. A., Kiez, T. K., Dudley, D., & Aubertin, P. (2019). The impact of circus arts instruction in physical education on the physical literacy of children in grades 4 and 5. *Journal of Teaching in Physical Education*, 38(2), 162-170.
6. Cairney, J., Veldhuizen, S., Graham, J. D., Rodriguez, C., Bedard, C., Bremer, E., & Kriellaars, D. (2018). A construct validation study of PLAYfun. *Medicine & Science in Sports & Exercise*, 50(4), 855-862.
7. Lundvall, S. (2015). Physical literacy in the field of physical education—A challenge and a possibility.

Journal of Sport and Health Science,

8. Huang, Y., Sum, K. W. R., Yang, Y. J., & Chun-Yiu Yeung, N. (2020). Measurements of older adults' physical competence under the concept of physical literacy: A scoping review. *International Journal of Environmental Research and public health*,
9. Bremer, E., Graham, J. D., Bedard, C., Rodriguez, C., Kriellaars, D., & Cairney, J. (2020). The association between PLAYfun and physical activity: a convergent validation study. *Research quarterly for exercise and sport*, 91(2),
10. Caldwell, H. A., Di Cristofaro, N. A., Cairney, J., Bray, S. R., MacDonald, M. J., & Timmons, B. W. (2020). Physical literacy, physical activity, and health indicators in school-age children. *International Journal of Environmental Research and Public Health*, 17(15),
11. Behan, S. (2020). *Moving well-being well: Evaluation and development of the fundamental movement skills in Irish primary school children through a physical literacy lens* (Doctoral dissertation, Dublin City University).
12. Li, M. (2020). *Exploring and Promoting Physical Literacy and Physical Activity of Primary School Students* (Doctoral dissertation, The Chinese University of Hong Kong (Hong Kong)).
13. Ramesha, K. D., & Shashidhar Kellur, (2024). The Fundamental Concept of Physical Literacy in The Present era: A Review study. *The Journal of Oriental Research Madras*, (XCV-VII), 65-73.
14. Vinod Mudibasanagoudar., & Sampath Kumar, (2025). The Relationship Between Sports Participation levels and student Attitudes towards physical education. *International Journal of Scientific Development and Research*, 10(9), a819-a832.