



## Adolescents' Physical Literacy Level Due Locomotor-&Body, Sending and Receiving Skills.

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### ABSTRACT

**Study Focus:** This study only aimed at assessing and evaluating of adolescents' physical literacy level due locomotor-&body-skills, sending-skills and receiving-skills, cased at four selected senior high schools in Bo, Southern Sierra Leone.

**Methods:** A self-restructured and pretested adolescents' physical literacy level questionnaire (APLQ) was the survey instrument for testing the parameters. The variables were scaled using One-sample t-Test of IBM-SPSSv.23 Statistics, with a sampled size of 120 participants, mean age of [15.5±3.5] ranged from (12-19) years, were selected using simple random sampling.

**Results:** The assessed and evaluated adolescents' physical literacy statistical test results showed significance difference in mean scores for all tested variables with locomotor-&body-skills scored lowest 17.3±6.0 (14.4%) of pre-test and receiving-skills scored highest 43.3±9.5 (36.1%) of pre-test in tables 2 and 6. The results were scaled @ 2-tailed significance of \*p<0.000 and \*\*p<0.001.

**Conclusion and Recommendation:** It was concluded that, a good number of adolescents lack the basic understanding of physical literacy as observed between the pre-test-and-post-test scores for all tested and evaluated variables slated in their calculated values. The adoption of physical literacy as an umbrella term for physical education, activity and fitness for a better understanding and appreciation of the public health benefits associated with it, was strongly recommended.

### KEYWORDS

Physical Literacy, Locomotor - Body, Sending and Receiving Skills

### Introduction:

Physical literacy is a fundamental and valuable human capability that can be described as a disposition acquired by human individuals encompassing the motivation, confidence, physical competence, knowledge and understanding that establishes purposeful physical pursuits as an integral part of their lifestyle, Almond, L. et al. (2012). The fundamental and significant aspects of physical literacy are that; everyone can be physically literate as it is appropriate to each individual's endowment, everyone's physical literacy journey is unique, physical literacy is relevant and valuable at all stages and ages of life, the concept embraces much more than physical competence, at the heart of the concept is the motivation and commitment to be active, the disposition is evidenced by a love of being active, born out of the pleasure and satisfaction individuals experience in participation, a physically literate individual values and takes responsibility for maintaining purposeful physical pursuits throughout the life course. Charting of progress of an individual's personal journey must be judged against previous achievements and not against any form of national benchmarks, Whitehead, M. (2010).

The concept of physical literacy has been developed over many years. It is seen, by a growing number of people, as the goal of the school subject, physical education. However, whilst this is extremely relevant, it is important to recognize that physical literacy is not restricted to the school years, but relevant throughout the life course. In this respect, six phases of physical literacy have been identified: infancy, childhood, adolescence, young adulthood, adulthood and older adulthood, Whitehead, M. et al. (2006). Over the past years there has been considerable interest, world-wide, in the concept of physical literacy. In Great Britain, a number of local authorities have adopted it as an overall guiding principle for their work in school-based physical education. In countries, such as Northern Ireland and Canada, physical literacy has been the focus for considerable rethinking in respect of children's physical development and has consequently been the inspiration behind the development of new programmes,

Whitehead, M. et al. (2006). There have been a number of interpretations of the concept that have moved away from the central tenets of physical literacy, which in some instances, physical literacy has been the name given to a programme of fundamental movement skills; implying that the concept is solely about the acquisition of physical competence. Other interpretations have focused on knowledge and understanding, particularly in the games context. Both these scenarios include elements of physical literacy, but do not represent the whole story, Almond, L. et al. (2012).

Physical literacy is founded on a strong philosophical platform with a belief in monism and rejection of dualism. The principle that our body is as significant to life as our intellect is central to the concept of physical literacy. This is very much in line with current research which sees our embodied dimension as integral to who we are and all we do, in no way being merely a servant of our intellect. Thus, at the heart of physical literacy is a commitment to the holistic nature of the individual. Furthermore, physical literacy relies heavily on an understanding of both existentialism and phenomenology, Whitehead, M. (2010). Fundamental to existentialist belief is that individuals create themselves as they live in and interact with the world. Phenomenologists understand that every individual will perceive the world from the unique perspective of their previous experience. These tenets are the platform on which physical literacy is built, Whitehead, M. (2010). To become physically literate, children need to master some fundamental movement skills, which will involve a series of developmental stages that the child will go through in order to master a particular skill, Balyi, I. et al. (2005). Fundamental sport skills involve using fundamental movement skills in a sport specific setting such as a child kicking a ball, which can be used in penalty kick in a soccer game, Higgs, C. et al. (2008). Physical literacy is being expressed in Sierra Leone and many Commonwealth Countries as Physical Education, Phy. Ed., or PE, also known as Physical Training or P.T. It is taken during pre-primary, primary, secondary and tertiary education respectively, Bebeley, S. J. (2008). It is an educational course related to the

physique of the human body and encourages psychomotor learning in a play or movement exploration, setting to promote health, *Anderson, D. (1989).*

This study only aimed at assessing and evaluating of adolescents' physical literacy level due locomotor & body skills, sending skills and receiving skills, cased at four selected senior high schools in Bo, Southern Sierra Leone.

**Materials and Methods**

**Survey Participants:**

The researchers interviewed mainly senior high school pupils with a sampled size of 120, which were selected using the stratified and simple random sampling methods, with a mean and standard deviation age of **[15.5±3.5]** ranged from **(12-19)**

**Measuring Instrument:**

A restructured but validated and pretested adolescents' physical literacy level questionnaire (**APLQ**) was adopted as survey instrument for testing the parameters previously used by Bebeley, et al. (2016). The pre-test was done on **40** pupils from University Secondary School Njala, imploring test retest **ANOVA**, yielding a range of intra-class correlation coefficient reliability of **0.75-0.86**.

**Testing Procedure:**

Each of the participants were issued a questionnaire and strictly instructed by the researchers to mark **[(0)-for-No]** and/or **[(1)-for-Yes]** against each option variables during the evaluation process for both pre-and post-tests respectively, after a ten (10) minutes briefing regarding physical literacy of the selected option variables under investigation adopting the classroom face-to-face-technique, on their schools' premises.

**Data Analysis:**

The frequency, percentage, standard deviation, mean, 95% confidence interval difference and One-Sample t-Test from IBM-SPSSv.23 Statistics, were used to compute, analyze and compare the results from the finding, which were tested @ 2-tailed significance of **\*p<0.000** and **\*\*p<0.001**

**Test Results:**

Do you Know that Physical Literacy Due Locomotor & Body Skills can be Linked to:	Pre-Test		Post-Test	
	n	%	n	%
Physical Activity of Walking	15	13	105	88
Physical Activity of Running	12	10	108	90
Physical Activity of Balancing	25	21	95	79
Physical Activity of Skating	23	19	97	81
Physical Activity of Jumping	10	08	110	92
Physical Activity of Skipping	19	16	101	84

	Grouped		t-Test	Sig.	95%CID			
	Freq	%			Mean	Std. Dev.	Lower	Upper
Pre-Test	104	14.4	017.3333	6.02218	07.030	0.001	10.9634	023.6032
Post-Test	616	85.6	102.6667	6.02218	41.739	0.000	96.2968	108.9366

Note: 95%CID = 95% Confidence Interval Difference; df=5; n=6; Test-Value=0.05; Vab=Variable

Do you Know that Physical Literacy Due Locomotor & Body Skills can be Linked to:	Pre-Test		Post-Test	
	n	%	n	%
Physical Activity of Throwing	47	39	73	61
Physical Activity of Kicking	49	41	71	59
Physical Activity of Striking	29	24	91	76

Physical Activity of Heading	48	40	72	60
Physical Activity of Shooting	39	33	81	68
Physical Activity of Hitting	43	36	77	64

	Grouped		t-Test	Sig.	95%CID			
	Freq	%			Mean	Std. Dev.	Lower	Upper
Pre-Test	255	35.4	42.5000	7.58288	13.713	0.000	34.4923	50.4077
Post-Test	465	64.6	77.5000	7.58288	25.019	0.000	69.4923	85.4077

Note: 95%CID = 95% Confidence Interval Difference; df=5; n=6; Test-Value=0.05; Vab=Variable

Do you Know that Physical Literacy Due Receiving Skills can be Linked to:	Pre-Test		Post-Test	
	n	%	n	%
Physical Activity of Catching	50	42	70	58
Physical Activity of Trapping	29	24	91	76
Physical Activity of Touching	37	31	83	69
Physical Activity of Blocking	53	44	67	56
Physical Activity of Handling	40	33	80	67
Physical Activity of Carrying	51	43	69	58

	Grouped		t-Test	Sig.	95%CID			
	Freq	%			Mean	Std. Dev.	Lower	Upper
Pre-Test	260	36.1	43.3333	9.52190	11.135	0.000	33.2907	53.2760
Post-Test	460	63.9	76.6667	9.52190	19.709	0.000	66.6240	86.6093

Note: 95%CID = 95% Confidence Interval Difference; df=5; n=6; Test-Value=0.05; Vab=Variable

**Discussion:**

Physical literacy can be described as a disposition characterized by the motivation to capitalize on innate movement potential to make a significant contribution to the quality of life, *Almond, L. et al. (2012)*. The comparative results of the finding from the grouped frequency, percentage, mean and standard deviation scores of respondents' physical literacy level of all tested variables during the pre-and-post-tests evaluation process due locomotor and body skills slated in table two; sending skills slated in table four; and receiving skills slated in table six, showed a significance difference in their respective grouped scores.

The significant difference in t-Test scores and 95% confidence interval difference scores clearly placed between pre and post-tests really indicated low level of adolescents' physical literacy with precise reference to the tested variables among sampled participants within the scope of study during the research process, which can also be noticed in their individually computed, analysed and compared scores and percentages placed in tables one, three and five respectively displaying considerably, the low level of adolescents' physical literacy referencing the tested option variables investigated. In another report, according to *Almond, L. et al. (2012)*, all human beings exhibit the potential of physical literacy. However, its specific expression will depend on individuals' endowment in respect of all capabilities, significantly their movement potential will be particularly to the culture in which they live, *Almond, L. et al. (2012)*. Individuals who are physically literate will move with poise, economy and confidence in a wide variety of physically challenging situations, *Almond, L. et al. (2012)*.

Physically literate individuals as expressed by *Almond, L. et al. (2012)*, will be perceptive in reading all aspects of the physical environment, anticipating movement needs or possibilities and responding appropriately to these with intelligence and imagina-

tion. Such individuals as reported by *Almond, L. et al. (2012)*, will have a well-established sense of self as embodied in the world, together with an articulate interaction with the environment, which will engender positive self-esteem and self-confidence, sensitivity to and awareness of embodied capability leading to fluent self-expression through non-verbal communication and to perceptive and empathetic interaction with others. In addition, *Almond, L. et al. (2012)* concluded that, physically literate individuals will have the ability to identify and articulate the essential qualities that influence the effectiveness of their own movement performance, and will have an understanding of the principles of embodied health with respect to basic aspects such as exercise, sleep and nutrition.

#### **Conclusion and Recommendation:**

Based on the results of the finding, it was concluded that, a significant difference was observed between the pre-test-and-post-test scores for all tested and evaluated variables as evidenced and slated in their percentage responses, 95% confidence interval difference scores and calculated t-values. However, it was strongly recommended by the researchers that, physical literacy be adopted as an umbrella term for physical education, activity and fitness for a better understanding and appreciation of the public health benefits associated with it by senior high school pupils.

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