PHYSICAL LITERACY: A NEW LEARNING DIRECTION FOR INDIVIDUAL DEVELOPMENT IN SOCIETY

PHYSICAL LITERACY: UNA NUOVA DIREZIONE DELL'APPRENDIMENTO PER LO SVILUPPO INDIVIDUALE NELLA SOCIETÀ

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ABSTRACT
Physical Literacy (PL) has gained increasing importance as it is not limited to the mere learning of physical skills in physical education, but extends to a holistic approach involving emotional, cognitive and social aspects.
The aim of this article is to explore the theoretical models that support PL, to analyse the educational interventions that foster its development and to discuss future perspectives for its integration into social and school contexts.

La *Physical Literacy* (PL) ha acquisito una crescente importanza poiché non si limita al mero apprendimento delle abilità fisiche nel campo dell'educazione fisica, ma si estende ad un approccio olistico che coinvolge aspetti emotivi, cognitivi e sociali.
L'obiettivo di questo articolo è esplorare i modelli teorici che supportano la PL, analizzare gli interventi educativi che ne favoriscono lo sviluppo e discutere delle prospettive future per una sua integrazione nei contesti sociali e scolastici.

KEYWORDS
Physical literacy; Physical education; Motor skills; Holistic well-being; Educational interventions.
Alfabetizzazione motoria; Educazione fisica; Competenze motorie; Benessere olistico; Interventi educativi.

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Introduction

The concept of Physical Literacy (PL), coined by British philosopher Margaret Whitehead, defines PL as motivation, confidence, physical competence, knowledge and understanding to evaluate and engage responsibly in physical activities for life, in relation to each individual's capabilities. This interpretation of PL represents a revolution in the way movement is understood and taught, aiming at the overall well-being of individuals. The definition provided by Whitehead, in fact, allows, from the outset, to orient and extend the topic of motor activity beyond mere physical exercise, including cognitive, psychological and social aspects related to the individual's active participation within society. Physical Literacy must be seen as an essential tool to combat physical inactivity and promote public health, given its potential long-term impact on physical, mental and social well-being. Movement education assumes an important role at all stages of educational life. Indeed, movement settles as an engine of emotions to push the subject to open up to communication through the pleasure of moving, to know and manage one's emotions, to overcome emotional blocks, frailties and excesses. In recent decades, the need to raise awareness of Physical literacy in the educational context has become increasingly evident; in fact, it is necessary for educators to encourage students to have a deep understanding of the role of physical activity understood as an essential element in daily life. It is important to envision the establishment of a true motor alphabet that is related to other alphabets, for learning to read, write, etc. On the subject, Professor Colella argues that "the physically literate individual has his or her own motor repertoire, consisting of motor patterns and learned executive variants, which is structured from school age and increases over time through the integration of received opportunities, quantitative and qualitative, particularly, during developmental age. Through the motor alphabet, the child has the ability to communicate, process and solve situations-problems to interact with the environment, systematically supplementing his or her motor repertoire with new responses and adaptations." (Colella, D., 2021). The challenge today is to create and promote good practices so that activities related to the movement are organized, with systematicity and transversality, starting from the period of kindergarten. Movement, as early as the preschool period, constitutes the means by which children explore and interact with the world around them. Through it, they learn to regulate and balance, both socially and emotionally, the educational experiences that are offered to them. In addition, movement becomes an early tool to develop awareness of others and begin to build interpersonal relationships. On the Frostig theme, "movement education can help a child adapt socially and emotionally because it can provide him with successful experiences and enable

interrelationships with others" (Frostig, M., 1970). Regular physical activity promotes not only proper bone development but also hardens the entire body. Movement confers greater musculoskeletal strength and endurance, increases cardio-respiratory endurance and keeps blood pressure at optimal levels. What is most important, however, is that assiduous motor activity also brings psycho-social benefits. The systematic practice of motor activity urges the development of adequate self-esteem and helps to feel satisfaction with daily goals achieved by increasing confidence in one's abilities. In fact, according to a study by the “Bambino Gesù” Children's Hospital, it is inferred that yoga is one of the disciplines that by exploiting the interaction of body, mind and behavior improves the psychophysical state of the individual. Research shows that patients by practicing yoga on a daily basis are able to more efficiently manage emotions such as: anger, fear and anxiety arising from hospitalization. Motor activity enables, particularly in children, better self-knowledge that fosters relationships with others, teamwork and social relationships. It also spurs one to overcome one's limits, cultivate the determination needed to achieve goals, respect others and be resilient and creative. In this direction, learning also benefits from motor activity as it improves attention, concentration, cognitive skills and coordination. In fact, Gardner's theory of multiple intelligences argues that all intelligences enjoy equal dignity and deserve to be cultivated, including kinaesthetic body intelligence (Gardner, H.,1993). Movement and thought, that is, physical and mental activities, travel and move along the same lines, contributing chorally, each according to its own specificity, to provide lifeblood to the child's sensory and perceptual, before motor, development. Movement, therefore, invokes affectivity which, if properly channeled, leads to the completion of the gesture albeit in a playful form; but if changes in mood and consequently also an active participation of the subjects are not inferred from the movement, it is very likely that that given situation of movement has not involved emotionally and socially enough, representing almost a nonsense for the subject: in this case there is no learning. From studies and observations, over especially this last two decades, it appears that about 80 percent of emotions are expressed in school sessions devoted to motor activity, both those of a positive and negative nature. Their, almost natural, externalization in the proposed movement activities, further improves the climate, allows a focus on strictly playful practice and management of emotions, in order to optimize the psychophysical well-being of the children involved. All with the complicity of the colorful and welcoming learning environments, in which every element, from the objects proposed in the room, to the furniture, to the scents, to the music that accompanies the encounters, is imagined and strongly desired to put the child at

ease and allow him or her the most spontaneous and profound expression. Physical movement plays a key role in the creation of nerve cell networks, but such inputs are lost if affectivity is lacking, that is, the child may not respond to a delivery due to a lack of willingness and interest. It is self-evident that movement represents the gateway viaticum that allows, individuals and children in particular, to develop knowledge and awareness of their bodies, appreciating their evolutions and, at the same time, recognizing their own emotions and those of others thus helping to form their social dimension. At this point, it becomes essential to start building a functional literacy competence, better known as literacy, which is fundamental for the integral development of the individual. This competence extends to the mastery of cognitive and linguistic tools that enable a critical and conscious understanding of the surrounding reality. Motor activity carried out systematically and with the support of specialized teachers constitutes quality pedagogical practice. Motor literacy, in fact, falls within the pillars of education defined by Jacques Delors: 1. Learning to know; 2. Learning to do; 3.Learning to be, 4. Learning to live together (Margiotta, U., 2017). Enabling, from an early age, the acquisition of a rich and varied motor alphabet, a valuable source of cognitive evolution and learning represents a key experience in growth, capable of transforming individuals into better people and laying the foundation for a healthier serene society. It is essential, therefore, to build a model of physical literacy in educational settings that starts from playful movements to instilling a fertile humus to draw on throughout life.

1. Motor literacy: comparing visions and development perspective

Physical literacy, defined as "the motivation, confidence, physical competence, knowledge and understanding to appreciate and take responsibility for engaging in lifelong physical activities" (International Physical Literacy Association, 2017), must be able to be channeled into a replicable and dynamic model. In this sense, it should be specified that the educational concept of physical education has a broad, but more importantly, evolving meaning. Nevertheless, whenever the topic is addressed, it is necessary to use clear definitions with a solid empirical basis and support the implementation of effective programs. Durden-Myers highlights the need for a systematic approach to promoting motor literacy, suggesting that sustained engagement in specific activities can lead to long-term benefits. She also makes the case for the importance of extracurricular activities as opportunities to expand participation and develop talents, emphasizing how translating PL philosophy into educational practice is crucial for real change (Durden-Myers et al.,

2018). Whitehead, too, highlights the urgent need for a precise definition and sound philosophical approach to operationalize PL. Through dialogue with experts and comparison with international initiatives, shared themes emerged, such as the continuous nature of PL and the need for a philosophical foundation that integrates monism, existentialism, and phenomenology. Such philosophical underpinnings are fundamental to addressing issues related to motor literacy and promoting an integrated approach to it (Durden-Myers & Whitehead, 2018). Keegan proposes a new definition of PL, which is holistic learning such that physical, psychological, cognitive, and social skills are integrated and interconnected. This approach emphasizes the importance of PL in promoting healthy and satisfying lifestyles, highlighting the need for a standardized framework for its teaching at all stages of life (Keegan et al., 2019). Dinham and Williams, on the other hand, examine for the first time the preparedness of teachers-in-training in promoting this approach. Their research highlights how Whitehead's definition had evolved to include not only the ability to move, but also the knowledge and attitude needed to use one's motor skills effectively. This is, arguably, the first major educational teaching switch. Indeed, the study emphasizes the importance of adequately preparing educators so that they can develop PL in their teaching practices (Dinham & Williams, 2019). Training educators from early childhood onward in physical education becomes critical for several reasons, including: the learning opportunities that are for participants that influence their continued engagement, and the quality of educators that determines the engagement and learning of participants (Hernaiz-Sánchez et al., 2021). The role of the educator is extremely important in providing a safe space in which individuals can engage in various learning activities. Roetert and colleagues state that "a proper understanding of physical literacy concepts is necessary to design programs based on students' experience, skills, age, and maturity level" (Roetert, E.P. et al., 2017). One of the challenges in developing physical literacy knowledge is the skills gap. If educators do not understand physical literacy holistically (the four domains: physical, cognitive, social, and emotional), they cannot effectively develop methods to model movement experiences and create play environments to support physical literacy development in young children. The key here is the concept that intentional learning occurs through intentional planning. Physical literacy development can coincide with early learning curriculum programs such as Flight Alberta's Early Learning and Care Framework, which focus on skill acquisition through child-led curricular play, co-constructing the curriculum. Balancing play and creating opportunities for competent motor development contributes to the development of a balanced and physically literate child. Working along these lines would also go

a long way toward growing the epistemology of physical education: the Motor Praxeology. Play is culture and such culture arises precisely sub specie ludi (Huizinga, J. 1946). The construction of a network of conscious activities, which start from simplified movements, such as to be proposed to children, and then translate into exercises capable of reproducing small patterns, lends itself to constitute a powerful pedagogical device that would favor the transition from movement to motor play, and then sport play, to support and grow those sociocultural and/or psychophysical characteristics that one wants to nurture. Mutual aid and cooperation, otherwise first healthy eating habits and proper approaches to personal hygiene, small active citizenship as a pedestrian or environmentalist can be conveyed through a set of targeted games that from movement, set appropriately, are such as to become routine motor play activities and then starter game sports, until they rise to "Suitable Sport". Experimenting with a broad motor, or rather socio-motor vocabulary, and enticing its approach as early as possible, means setting movement-related activities in a mode that is not already technical but relational. In this direction can be read some project initiatives with experimental didactic methodological characteristics that, promoted by the USR Calabria with extension and participation of UU.SS.RR. of Puglia and Basilicata already in 2015, in agreement with CONI, tended to share methods and strategies to innovate in the play-motor-emotional field the research enhancement of physical education kindergarten. Following this direction, it would be necessary to go beyond a simple network or investments on local tables to create a well-defined procedure and establish a demarcated line of development because movement through play represents the entrance hall of the house of Sport that is also defined as total social fact (Greco, G. 2004). To date, training preparation for early childhood educators is varied, ranging from some higher education to training with outside experts when externally funded projects are not taken over by agencies operating on the ground, thus local or by regional or state agencies. This is a critical gap, as educators with college education show better adherence to physical activity best practices than those without college education. In addition, physical literacy concepts increase in complexity as they include integration of motivation, skill development, and an understanding of structural movement skills to support a young child's physical literacy growth and development. As dealt with in the school procedures already in place, specifically the introduction of motor education teaching, by Law no. 234/2021 in elementary school for the fifth grade as of the school year 2022/2023, and for the fourth grade, as of the school year 2023/2024, of an achievement, so it would become a real pioneering choice to quantify also for the third, second and first grades of elementary school and for the first school

segment (let us remember it is not compulsory as attendance) an hourly quota to be allocated to the performance of movement activities carried out by a teacher with specific qualification. In fact, precisely because movement produces beneficial effects on psycho-physical and social development and learning, it would be appropriate to provide kindergarten teachers as well to be strategically entrusted with the first approach to it.

2. Promoting PL through conscious educational practices

The importance of physical activity for human well-being is established and indisputable. Physical literacy is an evolving educational concept that requires constant updates, both theoretical and practical, reflecting an increasing focus on the application of best practices in educational experiences. This highlights the need for an integrated approach to promote a culture of physical activity that is not simply enduring, but truly meaningful. At any age, practicing physical activity regularly has valuable health and vitality benefits. National data, however, tell us that in recent years, although we have witnessed a spread of sports practice, a certain degree of sedentariness persists in certain age groups. In the protection and promotion of health education, a crucial role is played by the school community, which, in alliance with the family, local associations and local government, can be a driver of healthy lifestyles. Through the school, with its organization by grades, a large number of pupils of different ages can be reached by implementing projects and paths that can be replicated, becoming the educational heritage of the institution and the entire community on which the school insists. It is, therefore, important to start at an early age by introducing motor activity as early as kindergarten, as exploring the outside world through movement helps children increase coordination, muscle strength, balance, motor skills and has a positive impact on cognitive development and learning ability, as shown by several studies. During childhood, the child builds the foundations of conscious motor skills: through play he explores and discovers the world around him, develops social skills, because he learns to share, cooperate and respect the rules that are the founding principles of any society, and interpersonal skills, learning to work as a team, constantly confronting himself and others, recognizing on the one hand his own limits and on the other his potential. Including physical activity among daily routines from an early age, making it an integral part of one's lifestyle, means activating virtuous circles that encourage healthy behaviors such as those of proper nutrition, discourage substance use, and contribute to overall health and harmonious development. The activities proposed to children will have a common

denominator: play and relationship with each other. The game, whether in individual or group form, will have a motor content, or functional or even an imitative or regulatory character The activities will be formulated in an experiential and playful form aimed at creating experiences that are linked to the awareness of one's own body with the aim of learning to govern it by giving meaning to the gestures made. The proposed activity may be in the form of free play in which the teacher sets up environments and materials and the child is left free to act (not to be trivialized by deeming it a filler of empty time, but to be used for the teacher's observation of the child); it may be in the form of semi-structured activities in which the teacher sets up spaces, materials or routes and the child chooses how to perform the activity within the assigned space and resources offered; or it may be in the form of structured activities in which the teacher sets up material environments and conducts the activity. It is appropriate to alternate moments of play with moments of pause. It can be difficult for children to stop, so introducing breaks to movement means calling attention, implies knowing how to wait, understanding timing, establishing a before and after. In the 3- to 5-year-old age group, the developmental goals to be pursued, are geared toward the development of sense-perceptual skills; the development of coordination skills both through activities involving the use of tools and with activities related to the control of basic static and dynamic patterns (walking running jumping crawling rolling throwing grasping balancing) and their adaptation in different environments; the governing of one's own behavior by interacting positively with peers, respecting rules. The National Curriculum Directions for Kindergarten," in the field "The Body and Movement" propose the "competency development goals" on which the teacher will formulate his or her planning (Ministero dell'Istruzione dell'Università e della Ricerca, 2012).

The ingredients for skill development are frequency, intensity and duration. Because of the young age of the pupils, it is clear that every activity will have to be carried out to give pleasure to the recipients, so that they have positive experiences and positive emotions are activated, which are fundamental for learning. The language used is also important and will have to be positive reinforcement aimed at enhancing, encouraging and supporting.

The goal is to activate a virtuous circle in which the experience of success increases motivation, strengthens the perception of being good, leading to positive spillover effects on 'engagement. In fact, motor activity and related physical experience, if misused, can become a source of disempowerment and inhibition. Finally, ritual should not be overlooked. Establishing rituals for beginning and ending activities will enable children to understand when it is time to begin and when to end. Thus

before starting, one can sit in a circle and remember the rules and explain what one is going to do; similarly, the moments after the conclusion of the activity, can be turned into moments of confrontation in which the young learners are invited to verbalize, draw a picture or choose a smiley face to describe the experience they had and the feelings they felt. Even if we are dealing with young children we must not neglect evaluation. By attributing a value to what the child does we can plan the next steps, by establishing a level of competence achieved it is possible to plan subsequent activities so as to always remain in balance between an activity that is too simple and unattractive, which would bore, and one that is too complex and at risk of frustration and rejection of play. An excellent tool are the observation grids that in a simple and clear way report the actions/activities that are to be evaluated. The evaluations are expressed on a measurement scale ranging from nothing to a lot, or by semi-quantitative scales defined by adjectives. The construction of motor literacy cannot be limited, however, to school projects alone, but must have its natural continuation, in space and time, outside that context as well. Fundamental in this is the role played by local governments and sports associations operating in the area that field initiatives in continuity with school projects, contributing to the social validation of P.L.

Pedagogical reflection, the dissemination of a sports pedagogical culture, has contributed to and ascertained motor activities in the educational sciences, providing a new vision, which allows the extraordinary training potential of sports and motor activities to be grasped. Education and sports are, therefore, a combination that needs collaboration. In this sense, the sports movement cannot be for the benefit of the few because the aggregative moments it manages to express often become a real anchor of salvation for many young people. Save the Children states that sport represents the third educational agency next to family and school (Save the Children, 2021). Hence the importance of Physical Education, frequently underestimated, as an integral part of building a vertical curriculum by competence. In a renewed school, in which the psycho-physical well-being of the child is a flywheel for the development of all potentialities, the construction of a new educational model places physical-motor education at the center that uses corporeity as a conduit for learning. From the synergy between educational agencies and the territory, tools can be prepared to raise awareness of motor practice,(from applications for tablets or PCs such as step counters, to the creation of bicycle and pedestrian paths) that through the dissemination of specific knowledge, contribute to the construction of rational motivations incentivizing the adoption of simple motor practices useful to health and well-being by activating a virtuous circle that from the individual dimension becomes global.

Conclusions

Propose movement from the school age of kindergarten, represent the new and final challenge of motor activities, in order to build a real culture of movement to cultivate from the beginning the elective affinities with the body and feel "the being well with", which will then translate into psychophysical well-being. Preschool, stands as that beneficial time frame for both professional observation and pedagogical intervention that needs to be appropriately grasped in order to become the keystone and develop those cognitive prerequisites suitable for learning. Movement represents that pivotal activity for a peaceful and effective learning process. The UNESCO Education 2030 Framework emphasizes the importance of sustainability and global citizenship in education. It emphasizes the need to equip students with the knowledge, skills and values needed to understand and address global challenges, promote sustainable development and develop global citizenship (UNESCO, 2023). Enabling, from an early age, the acquisition of a rich and varied motor alphabet, a valuable source of cognitive and learning evolution, could become a key experience in growth, capable of transforming into better people and laying the foundation for a healthier and more peaceful society. To conclude, it is self-evident how schools today too often find themselves caged in an approach anchored in pure sciolism and mere printed paper, struggling to evolve toward an educational model that is concretely formative and participatory. Teaching should stimulate curiosity, critical skills and tangible formative participation of learners yet modern education today has not achieved this destination. As Noam Chomsky states, "True education is teaching people to think for themselves: it is a complicated business that requires the ability to capture students' attention and interest to make them want to think and explore new fields." This process is not trivial and requires courage, passion and competence, and in particular the ability to capture students' interest so as to increase their desire to know and experience lasting goals. Only through such a change can physical literacy truly prepare future generations for a new approach to living and navigating the complexities of the world, making them fully aware of the importance of paying attention to their bodies and the benefits this attention brings as physical and psychological well-being.

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