



L'Allenamento funzionale come processo pedagogico

Functional training as a pedagogical process

Francesca Caso

University of Naples "Parthenope" – francesca.caso@uniparthenope.it

Lorenzo Donini

University of Naples "Parthenope" – lorenzo.donini@uniparthenope.it

ABSTRACT

The progressive and significant increase in motor and sports activities has allowed it to gain great relevance in different everyday life contexts, thus recognizing the educational nature that sport has taken on over time and becoming an important aspect of all the main social interaction contexts. In recent years, the body and movement have gained significant space among the areas of pedagogical reflection, and so motor and sports activities represent a remarkably important dimension as specific systems of education, the conditions of educability of which must be highlighted so that sport can represent a context of life aimed at empowering all subjects. Therefore, pedagogy offers young people a balanced growth also from a socialization point of view, aimed at promoting a healthy lifestyle, psychophysical well-being and the positive responses it generates throughout life. What emerges is the need to promote sports education, given its importance in the educational system starting from elementary school, up to secondary schools and universities. The need is to enhance the educational, sports, preventive, cultural and social purposes for the person's growth in a free and democratic environment, which values diversity and therefore inclusion.

Il progressivo e considerevole aumento dell'attività motoria e sportiva ha permesso che essa assumesse grande rilevanza nei diversi contesti della vita quotidiana, riconoscendo così, la natura educativa che lo sport ha assunto nel tempo e diventando quindi, una componente di fondamentale interesse in tutti i principali contesti di interazione sociale. Il corpo e il movimento, hanno assunto negli ultimi anni, un significativo spazio tra gli ambiti di riflessione pedagogica, così le attività motorie e sportive rappresentano una dimensione notevolmente importante quali sistemi specifici di formazione, di cui vanno evidenziate le condizioni di educabilità necessarie affinché lo sport possa rappresentare un contesto di vita proteso verso l'emancipazione per tutti i soggetti. La pedagogia, quindi, offre ai giovani una crescita equilibrata anche in un'ottica socializzante, finalizzata allo stile di vita salutare, il benessere psicofisico e a favore delle positive risposte che essa genera lungo tutto l'arco della vita. Emerge, dunque, la necessità di promuovere l'educazione didattica sportiva, data l'importanza che riveste nel sistema dell'istruzione

dalla scuola primaria, agli istituti di scuola secondaria e fino alle università. La necessità è di valorizzare le finalità educative, sportive, preventive, culturali e sociali, per la crescita della persona in un ambiente libero e democratico, che valorizzi la diversità e quindi l'inclusione.

KEYWORDS

Movement Education, coordination and conditioning skills, functional training, values, psycho-physical well-being.

Educazione al Movimento, capacità coordinative e condizionali, allenamento funzionale, valori, benessere psicofisico.

Introduction

Sports training is a human and social action within an educational relational space that affects human growth and formation. Many scholars define it as a pedagogical process (Verchošankij, 1987), which requires a specific organization to achieve “a systematic, complex and global action on the individual’s personality and physical state” (Verchošankij, 1987, p. 9). According to Teodorescu (1981), the explicit purpose of this process and of the methodical, scientific and systematic actions employed is to lead to the “development and formation of the player’s personality, considered individually and integrated in the team” (p.27). According to the author, the athlete-player is considered “from the point of view of his or her physical and sports development, in view of the realization of a maximum performance capacity” (Ibid.). Therefore, the objective is the person’s comprehensive training at physical/functional, motor, psychological and cognitive level, aimed at the achievement of optimal sports performance. Thus, the athlete’s functional training will be tailored to the interlinked technical actions, to the adaptation to the different game phases even in situations of confrontation with the opponent, to the stimulations of motor qualities and psychic tension, and to the different degrees of neuro-muscular stimulation. Nevertheless, the relational, physical and temporal space dedicated to sports training is not only a place of preparation and physical exercise, aimed at achieving maximum sports performance; it is also a space in which the emotions and human values of a group of people who train and form a “team” are shown, conveyed, manifested and interpreted (Maulini, 2019). In fact, according to Teodorescu (1981), the sports team is considered as “a complex and dynamic social micro-system (stable in terms of number, made up of specialized players) that has a functionality, realized on predetermined principles and rules of coordination of specific actions (such as opponents, and game conditions, which vary according to the matches). The players’ interaction building model leads to their integration in a system, thanks to the organization, coordination and rationalization of individual interactions and actions” (p. 123). Since we are dealing with relationships and interrelationships, it is therefore no longer possible to overlook the individual psychological and psycho-sociological aspects within the group. In fact, Lombardozi pointed out that training is first of all a “pedagogical process [...] of personality education aiming at finding the balance of the different areas that characterize it” (Lombardozi, 2012, pp. 50-51). Consequently, this complex human activity requires a systemic approach capable of holding together and

developing the physiological, biomechanical, technical-tactical, psychological and social aspects in an integrated way, to the benefit of each individual in the group and the subsequent harmonization between individuals. All this in order to get a unanimous merger of intentions for the achievement of the functional objectives of the team. Therefore, training becomes an educational space within which human beings have the opportunity to develop their full sports, educational and personal potential in an integrated and global way. For this primary act to be expressed in power, it is essential to understand training as an action aimed at responding to the subject's original thrust and his or her predisposition to educability. It is therefore important to aim at individual development and the empathic predisposition to take care of the other, to guide, support, motivate and accompany him or her along the path of that process of "continuous and growing improvement" (Bertolini, 1958, p.64), inherent in the nature of the homo educandus that cannot be limited to achieving a certain output or high performance. This is the result of a single part of the training; in fact, it is a broader and more complex process, which should be above all deliberately educational. The term "to train" refers to deeply pedagogical concepts "such as those of 'method', 'goal', 'motivation', 'accompaniment', 'effort', 'habit', 'communication', 'design/programming of interventions', 'individualization', 'gradualness', and so on" (Isidori, 2009 p. 87). In fact, according to Teodorescu (1981), the mistake would be not to consider training as an educational process; this could upset the functionality of a team, and could explain the many dropouts in sports practice due to burn out especially in young high-level athletes, caused by the social isolation to which they are often forced. Because of the many training sessions and competitions required for high-level performance, athletes are forced to give up other activities, and often neglect social life and interpersonal relationships outside of sports. In this way, in order to devote themselves exclusively to their physical, technical and tactical preparation, athletes experience high stress levels that, combined with a strong psychological pressure due to high performance demands, expose them to a high risk of injury (Mantovani, 2017). In fact, Lombardozi (2001) warned us that: "a coach who does not take into account the complexity of the human person, but is rather inclined to 'use' players who are 'obedient, submissive, and disciplined' because they are educated to consider these requirements as the duties of a good player, will not even realize that the achievements of the sport activity can be more easily and completely fulfilled by means of a significant emotional involvement of the athletes themselves in their activity" (pp. 32-33). This means that the coach has the duty to recognize and welcome the athlete first and foremost as a person, taking responsibility for his or her education, facilitating the change processes of which the athlete-trainee must be an active protagonist (Maulini, 2019). Therefore, promoting an educational relationship means making sure that it represents "a mutual gift of sense by two consciousnesses in a relationship of co-existence, towards the achievement of an end and in a project perspective". This relationship is set up intentionally, and from the pedagogical point of view, is understood as "the prospect of certain horizons, visions and values, towards which to strive and by means of which to modify human behavior in a continuous and increasingly higher improvement" (Bertolini, 1958, p.64). Therefore, the educational relationship is a relational system in which all the subjects involved in it give rise to a subjective interdependence. The athlete-trainee, "with his or her mere presence, determines a series of dynamics, responds to the stimulations received, reviews the behavior patterns of the [educators-coaches], contributing constructively to the training process" (Pati, 1994). This dynamism is made possible by the educational feedback indicating the bi-directionality, reciprocity and circularity inherent in this relation-

ship; all elements that allow for the continuous improvement and development of all actors involved in the relationship, and for the establishment of a bond of collaboration and cooperation which is authentically educational and formative (Colombini, 2015). The educational relationship is inherently asymmetrical. The asymmetry is not at a human and existential level, but concerns the diversity of backgrounds, of experiences, of the pedagogically significant cognitive heritage existing between the actors involved and the disparity of technical-tactical skills between coach and trainee. Therefore, this relationship is always and simultaneously symmetrical - in terms of the value of the individuals involved - and asymmetrical - in terms of the level of knowledge of each individual. This difference in level and the recognition by the athlete-trainee of the objective and normative superiority of the coach-educator (Bellingeri, 2015) allows for the development of the educational process. This process, in an evolutionary and relational sense, is always aimed towards co-planarity (Rossi, 1992), namely it is intentionally aimed at fostering "the increasing attenuation of the initial disparity, and consequently, an increasing autonomy of the educational subject, although always within the relationship and by means of it" (Milan, 2001, p. 69). In fact, the purpose of the educational relationship is to unleash the potential of the athlete-trainee, thus allowing him or her to achieve the emancipation that will allow him or her to live in complete freedom and autonomy. This emancipation requires responsibility and willingness to be involved, by undertaking a chosen and shared task and acting in accordance with it. Since training is a human encounter that carries significance, values and opinions aimed at the enrichment, modification, improvement and development of all those involved in it, must necessarily be set up as an intentionally educational relationship. This means that, if "from the motor point of view, the knowledge of the level of coordination and conditional development achieved by each trainee represents an indispensable element to identify the most appropriate activities for each subject" (Mantovani, 2017, p. 24), from the educational point of view it will be important to understand the educational needs and resources, interests and skills that need to be developed or enhanced to facilitate the emergence of adaptive and positive behaviors (life skills). Furthermore, it will be important to convey those values that represent the foundations on which to co-construct a meaningful project perspective with the athlete, which will become tangible in terms of goals and shared actions that will make it possible to achieve them.

1. Educational process and performance improvement

The concept of trainability, i.e. the ability to adapt to stimuli and training loads, and the related improvement in performance (Weineck, 2009), revised in a pedagogical key, must be understood as both aimed at improving performance, and as a chance for the person to develop and improve at holistic level. Therefore, it is important to focus on the person's capabilities and morpho-functional genetic resources, as well as on his or her motor skills and on those of movement control and transformation. Consequently, the motor qualities related to psychological and educational aspects, undergoing constant and adequate stimuli, will certainly lead towards adaptations to facilitate the acquisition of increasingly complex motor skills, but also to ensure the development of relational, cognitive and emotional dimensions in a closely related way. The purpose of functional training is to develop motor skills through planning, the achievement of which is conditio-

ned by the evolutionary-educational phases of the human being. In particular, it is conditioned by the identification of “sensitive phases”, thanks to which it is possible to increase part of the motor-sports and educational process of performance, when the trainability is significantly high. Researchers in the field have attempted to identify some windows of possibility, namely, standard developmental stages in which to train certain skills (La Torre, 2016, pp. 28-29). However, the chronological development cannot be predetermined in an absolute sense, it does not always correspond with the biological one; in fact, the transition between developmental stages can be individually very heterogeneous. This is one of the landmarks for individualizing training, i.e. for modulating training loads, carried out according to the person’s biological development and the athlete’s motor ability to adapt to them, thus determining the consequent acquisition and development of motor skills. This adaptability, in addition to being determined by age, health state, lifestyle, functional and structural condition, seniority and training habit, is given by the ability to adapt to the emotional load that they involve (Ibid). Hence, trainability is given by the possibility of developing motor skills and abilities, and simultaneously, by emotional characteristics, social relationships, perception sensitivity, multiple intelligences and related cognitive styles (Gardner, 2005). The latter factors - the emotional, social, perceptual and cognitive ones - in the developmental process are characterized and determined by universal modifications, individual differences and the environmental context (Mussen, et al., 1990). This means that training planning must be conceived and structured as a personalized educational process (training personalization) that aims at the integral development of all the athlete’s/person’s dimensions, and not only at improving sports performance. Therefore, when implementing a training plan, “any training stimulus that refers only to one aspect of the personality and does not take into account the involvement of other areas, in addition to losing most of its training potential, runs the risk of accentuating the clear imbalances between the various personality traits, thus producing effects that are sometimes very far from those that every coach generally proposes” (Lombardozi, 2001, p. 31). Trainability and educability respond to an original and intrinsic thrust of human nature towards growth, perfection and emancipation. In an educational perspective, it should make use of stimuli built with an educational intention, so as to allow the person to attach new meanings to the experience of perfectibility of such learning, which is not limited to the body; all this while respecting each person’s phases of evolution and development and, therefore, his or her possibilities and limits. These limits, in the Kantian difference highlighted by Isidori in his book *“La pedagogia come scienza del corpo”* (2002), should be understood as boundaries: “Whereas a limit can be understood as an extreme line, a last degree, a closed and circumscribed space that does not give the possibility to go beyond, the concept of boundary seems to delimit and circumscribe a space that is ‘in the middle’, ‘in between’, and ‘next to’ other spaces, marking close areas that can be incessantly crossed (and therefore explored)” (p. 93). Therefore, the border must be understood as a possibility and a potentiality. By nature, humans are inclined to overcome these boundaries, but this must be done while respecting their need/desire for growth and possible development, which is what we define as “potentiality”. In order to realize this potential, it must be based on intentional educational actions that arise from the choice of methodologies, strategies and values determined by the deep knowledge of the trainee. It needs to develop a training methodology which is intentionally educational, that is, a technical-practical and critical-reflective science that makes use of the knowledge of all sports sciences,

without neglecting those related to the human sciences (Isidori, et al., 2012). This must result in the structuring of training plans that will employ not only a technical-tactical evaluation, useful to determine the different learning levels or phases of a motor skill through optimal training loads, but also an analysis of the educational potential of the person and the team, in order to undertake a programming aimed at the person's integral development (therefore, not only aimed at achieving sports performance). This is especially important in the youth sports sector where the coach and all the operators will be responsible for promoting the acquisition of values by developing life skills through the transversal nature of sport skills and values, such as: respect for oneself/others/rules, dignity, humanity, solidarity, responsibility, righteousness, sacrifice, effort, commitment, honesty, sense of justice, courage, determination, dialogue, tolerance, diversity, friendship, loyalty and competition (Maulini, 2019). These values can only be effectively conveyed by developing positive behavioral patterns that always stem from an axiological frame of reference. In fact, it is not possible to educate to values if not through behaviors, just as it is not possible to understand a person's values if we do not know how he or she behaves and acts. Values guide human conduct. The constant implementation of virtuous actions favors the development of positive habits that involve the adoption of value systems of reference.

2. Sport and educational values

Therefore, to promote educational practice and sport, virtuous circles must be carefully built and activated. Sport is a valuable tool for activating this circularity, since it is a relational space in which actions must necessarily respond to shared rules, just like the proper functioning of the sports game. A valuable activity that should be considered a milestone in movement sciences, in the development of the motor process and in the practice of motor activities. In fact, through the playful competition, it is possible to influence attitudes and behaviors, thus providing the student with the values necessary for choosing consciously correct lifestyles by developing "the abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands and challenges of everyday life" (World Health Organization, 1993, p. 5). The abilities or life skills (not to be confused with the individual values system, from which everything originates), consist of the person's three organic dimensions

- Cognitive dimension, namely the acquisition of the critical and creative thinking skills in order to solve a problem or make a decision consciously;
- Emotional dimension, related to the ability to manage one's own emotions, by recognizing and regulating or channeling them in order to use them appropriately;
- Relational and social dimension, thanks to which the ability to communicate effectively both verbally and non-verbally, i. e. the ability to listen actively, allows establishing and maintaining meaningful relationships with people" (Maulini, 2014).

In addition to life skills, through sport, we also train - though often unconsciously - the soft skills that "represent a dynamic combination of cognitive and meta-cognitive, interpersonal, intellectual and practical skills". They "are personal traits, goals, motivations and preferences that are considered important in the labor market, but also at school and in other areas. Soft skills are predictive of success in life," (Heckman and Kautz, 2012, p.452). Just like life skills, they are cross-

functional and can only be detected by observing the behaviors applied in the specific contexts in which they are implemented. In fact, Pellerey (2016) grouped the skills logically, based on a European Union carried out in 2011, as follows:

1. "Personal effectiveness skills: self-control and stress resistance; self-confidence; flexibility; creativity; lifelong learning. These skills reflect some aspects of an individual's maturity in relation to himself/herself, to others and to work. They are related to performance of an individual when dealing with environmental pressures and difficulties;
2. Relationship and service skills: interpersonal understanding; customer orientation; cooperation with others; communication. These skills enable people to understand the needs of others and to cooperate with them. Communication skills are linked to all clusters and they are included in this one because of their important role in relationship building and communication with others.
3. Impact and influence skills: impact/Influence; organizational awareness; leadership; development of others. Skills in this cluster reflect an individual's influence on others. Managerial competencies are a special subset of this cluster.
4. Achievement skills: achievement orientation, efficiency; concern for order, quality, accuracy; initiative, proactive approach; problem-solving; planning and organization; information exploring and managing; Autonomy. The essence of this cluster is a tendency towards action, directed more at task accomplishments than impact on other people.
5. Cognitive skills: analytical thinking; conceptual thinking. These two skills reflect an individual's cognitive processes - how a person thinks, analyses, reasons, plans, thinks critically, identifies problems and situations and formulates explanations, hypotheses or concepts" (pp. 43-44).

If we compare soft skills with life skills, we realize that the former contains the latter and qualify them even more, as they are also used for career guidance and are considered key competencies in the labor market within employability skills. Many of these skills are implicitly developed through sports practice, and being cross-functional, if made explicit through critical-reflective educational processes, can be transferred "out of the gym" (Hellison, 2003) or the game field, and applied in other life contexts (at school, with family, friends, at work, and so on) (Maulini, 2014). As indicated by Bruner (1964) the transfer of principles and attitudes "consists of learning initially not a skill but a general idea, which can then be used as a basis for recognizing subsequent problems as special cases of the idea originally mastered. This type of transfer is at the heart of the educational process-the continual broadening and deepening of knowledge in terms of basic and general ideas" (p.57). For example, if we think of sports skills related to conditional motor skills - strength, endurance, speed - and we put them in relation to life or soft skills, we realize how transversal they are at a symbolic and value level, and how much they can help us in transferring educational significance. Some examples are endurance and strength skills, which can be assimilated to the ability to manage stress, as well as to emotional intelligence, perseverance, commitment, self-control, goal orientation, efficiency and self-confidence. The quickness/speed skill can be the basis for developing anticipatory skills useful when making decisions and solving problems, as well as for goal orientation, efficiency, attention to order, quality and accuracy, and the ability to take initiative and be proactive. On the other hand, coordination skills allow the athlete to safely and efficiently control his or her motor actions, both in predictable (stereotyped) and unpredictable (variable) situations, and to learn sports movements relatively quickly. In order to be simplified through an analysis, these can be divided into general and special coordination skills, keeping in mind, however, that their fun-

tioning is systemic, i. e. that each of them works interdependently with the others. In fact, as specified by Blume (1981) “a human ability never acts independently, never manifests itself alone, without being in relation with the others” (p.77). Therefore, a coordination skill is always influenced by the others that are structurally related to it. Furthermore, general coordination skills include motor learning, motor control, and movement adaptation. Specifically, motor learning skills allow the athlete to acquire and develop motor skills through repetition, practice, and training. Therefore, movements repeated several times will become consolidated after several adaptations. Instead, thanks to control skills, it is possible to direct and control the movement at a conscious and unconscious level, with respect to the programmed schemes, which require maximum precision at a rhythmic, spatial and temporal level. The adaptation skills, on the other hand, allows adapting the movement according to environmental and situational changes, modifying it in relation to the different conditions arising during the sports activity. Therefore, the training of general coordination skills is linked to the acquisition and strengthening of life or soft skills, related to the development of personal effectiveness (self-confidence, flexibility, creativity, self-control, stress resistance and emotion management), but also to the cognitive dimension (self-awareness, critical/analytical/conceptual thinking, problem-solving and decision-making, ability to formulate explanations and hypotheses and to elaborate concepts). The latter dimension is oriented to achievement skills (efficiency, concern for order, quality and accuracy, information exploring and managing, planning and organizational skills, and autonomy) and to the impact and positive influence on others (goal orientation, ability to take the initiative, organizational awareness, leadership skills), by developing relationship skills (interpersonal understanding, cooperation with others). Finally, special coordination skills are:

- Balance skills, which allow keeping the whole body in a state of balance, maintaining it or regaining balance during or after big movements;
- Orientation skills, which allow changing body position and movements, in space and time, with respect to a defined field of action. They are divided into spatial orientation skills and temporal orientation skills;
- Differentiation skills, which allow expressing a gesture in an accurate and efficient way, achieved by harmonizing the various phases of movement and in relation to the body parts involved in the performance;
- Rhythm skills, resulting from both understanding a rhythm coming from outside and being able to reproduce it from a motor point of view, and from realizing an internalized rhythm in one’s own motor activity;
- Reaction skills, which grant the timely beginning of the performance of a movement in relation to a signal. The signal can be acoustic, visual or tactile. The stimulus may be predictable or non-predictable, and the response to it may be stereotyped or non-stereotyped;
- Transformation skills, which allow adapting to the motor action while performing it, according to any changes in the situation (whether perceived or expected), or implementing a completely different one;
- Segmental coordination skills (or combination and matching skills), which allow for the coordination between the movements of the body parts (e. g. the right upper limb with the left upper limb, the trunk with the head, the lower limbs with the upper limbs), and between segmental movements and global body movements, in order to achieve a specific motor goal (e. g. arm-leg coordination when running).

The strengthening of these skills is associated with that of life and / or soft skills related to the development of the cognitive dimension (self-awareness, critical thinking, analytical and conceptual thinking, problem-solving, decision-making) and of relational skills (effective communication, interpersonal understanding, cooperation with others, leadership). Furthermore, it is closely related to those skills needed to have a positive impact and influence on others, and to achieve both a high degree of effectiveness (self-control, stress resistance, self-confidence, flexibility, creativity) and achievement (autonomy, achievement orientation, efficiency, planning and organization, information exploring and managing, concern for order, quality and accuracy, initiative). In short, terms, according to Blume (1981), we can state that “a high level of coordination skills underlies performance skills in all areas of life, including sport”.

3. Functional training of life and soft skills

The training of coordination skills is tailored according to the motor task required in the specific sport, to which also corresponds a different qualitative development of life or soft skills. For example, if the motor learning ability of a volleyball player depends on his or her orientation, reaction and transformation skills (Blume, 1981), it also depends on the self-awareness of his or her own resources to be put into play by playing in cooperation with his or her teammates (being a team sport game). Moreover, it also depends on how to understand interpersonally not only his or her teammates but also his or her opponents, as well as on his or her anticipation skills, whereby information exploring and managing, flexibility, self-confidence and creativity are fundamental in order to promptly and effectively adapt the motor action according to the perceived or expected changes in the situation that require critical and analytical thinking, problem-solving and decision-making skills and a high level of attention, self-control and achievement orientation. This example explains how the development of motor coordination skills is always subordinate and inevitably connected to that of life and soft skills. Another analysis that can allow identifying educational aspects that can be developed in sport can be carried out starting from the distinction between open skill and closed skill sport. This can help understand how the predictability or unpredictability of the environment affects the development of life and/or soft skills differently. If the conditions of the environment are stable, as in the case of closed skill sports (swimming, figure skating, gymnastics, rowing, and so on), the actions performed by the athlete are regular, controlled and stereotyped, implying a strong attention to the precision of his or her movements, and therefore, to his or her proprioceptivity, which requires a constant evaluation of his or her own body position with respect to the environment and minimal adjustments to be able to perform correctly. This intense body control implies skills related to stress management, self-control, critical thinking, attention, self-awareness, order, quality and accuracy. If on the contrary we are dealing with open skill sports (football, basketball, baseball, volleyball, fencing, tennis, and so on), we are in a highly complex environment, given by the unpredictable, changing and variable game situations. So the athlete is required to a continuous adaptation, understanding and rapid interpretation of game situations, with a continuous integration of proprioceptive and exteroceptive skills, for an effective management of his or her movement and technical gestures with respect to the opponent, the ball, and so on. The unpredictability that characterizes these types of sports requires, and there-

fore implicitly develops skills such as stress and emotions management, creativity, anticipation, decision-making, problem-solving, and verbal and non-verbal communication effectiveness. Another perspective from which it is possible to analyze sports and identify sport skills transferable to other contexts of the athlete's life is the distinction made by Parlebas (1997) between individual/psychomotor sport games and team/sociomotor sport games. The former do not provide any kind of interaction with opponents or teammates, so we can say that they promote "the ability to put oneself to the test, develop self-awareness and promote the overcoming of personal weaknesses, starting from the person's technical -tactical and psychological resources" (Maulini, 2014, p. 41). In the latter, there is a motor interaction with others (opponents and teammates) that can be of cooperation, opposition and cooperation/opposition. They promote "verbal and non-verbal communicative exchange, openness to the other, acceptance of one's own and others' mistakes, the functioning of relational and group dynamics, the sharing of a common goal and the search for strategies" (Ibid.). Parlebas (1997) also pointed out that "the athlete is not a physiological machine made up of muscles, tendons, joints, a pulmonary murmur, a heart pump. The gymnast attempting a parallel bars dismount must also overcome his or her fears; the judoka must perceive and anticipate the plans of his or her opponent; the rugby player must assess the trajectory of the ball, establish a speed of movement and interpret the other's intentions; the skier must observe the track, and take useful information to be able to better overcome the slopes; the canoeist must decode the rough water surface that runs in front of him or her, and calculate in advance the actions to be taken to overcome obstacles. More than a reflex, we are faced with a reflection. Moreover, we can understand how much the affective sphere is stimulated: fear, attraction, aggressiveness, sense of danger. Motor conducts bring into play the fundamental dimensions of a person, such as the biomechanical, affective, relational, cognitive and expressive ones. Therefore, by intervening on motor conducts, it will be possible to deeply influence the personality of the individual who acts" (pp. 33-34). The indissoluble relationship between mind and body and the important role played by bodily movement in learning is reaffirmed by the embodied cognition theory (Clark, 2009; Varela, et al., 1991). The body moves within a relational and physical space that it experiments with, and in which it gains emotional and cognitive experience by constructing knowledge and developing self-consciousness (Wilson, 2002). The effects of this theory on the educational practice led to the pedagogical construct of embodied education, which highlights the importance of developing in the individual the awareness of the indissolubility between the corporeal experience in the environment and the cognitive functions related to it, through approaches and educational situations (affordances) aimed at promoting it (Ceciliani, 2018). Consciousness is realized by paying attention to oneself (mindfulness), to what surrounds oneself, to what happens while manifesting it, prompting self-knowledge through bodily and sensorimotor perceptions. This means that the life or soft skills that sport implicitly develops through the corporeal experience potentially have a much broader value, which must be recognized and understood in order to be transferred and used in all areas of life, and not just in sports. All this can and must take place at all levels of sports practice, from motor disciplines courses for beginners to high-level sports situations.

Conclusions

The athlete must be aware that his or her motor actions are related to his or her emotional, cognitive and relational dimensions. To promote the development of this awareness it is essential to use tools and methods to promote the critical-reflective dimension, such as a logbook, the screening and analysis of movies about sports and education, the match analysis (already generally used for sports performance analysis) which is considered useful and must then be rethought as a match educational analysis. This latter tool can therefore be used to analyze and critically reflect on the educational, behavioral and value aspects of particular moments of a training session or a competition. It is used to corroborate: the Sports Values Clarification Method (Isidori, 2008); the Sports Values Developmental Analysis and Observation System (Ibidem); Thomas Wandzilak's Model (1985) for values education in the sport context; Donal Hellison's Procedure (2003) for the development of personal and social responsibility through sport; Danish's GOAL and SUPER programs (Danish, 1997, 1998; Danish et al. 1992 a and b) for the development and enhancement of life skills through sport. The proposal of these tools and their possible use must be provided for in the training plan, and therefore in the educational strategies identified in the functional training methodology, both for achieving the learning objectives that must be aimed at the integrated development of technical and tactical aspects of the discipline, and for the acquisition and/or strengthening of life skills and the consequent transmission of values. Therefore, according to what is indicated in the initial definitions of the work, training should be intentionally designed as an authentic pedagogical process [...] of education to personality, aimed at finding the balance of the different areas that characterize it" (Lombardozi, 2012, pp. 50-51). This implies the development of the coach's pedagogical skills, who must be able to "have at his or her disposal" and "know how to use" the useful and necessary tools to detect the value aspects and life skills that athletes hold (which need to be developed or enhanced), as well as how to do it by integrating the motor and technical-tactical ones. Only if the mission of each exercise, motor act or movement will go beyond the mere performance approach, sport will be able to express its educational dimension and become capable of developing the person's motor, psychosocial and physical dimensions in an integrated way, thus marking the construction of active and healthy lifestyles (Maulini, 2019, 2014, 2006) by facilitating the achievement of a harmonious functional, physical and psychic balance, dynamically integrated into the natural and social environment (WHO, 1986, 1998).

References

- Bellingreri, A. (2015). *Imparare ad abitare il mondo. Senso e metodo della relazione educativa*. Milano: Mondadori.
- Bertolini, P. (1958). *Pedagogia e fenomenologia*. Bologna: Malipiero.
- Blume, D. D. (1981). *Le capacità coordinative: definizione e possibilità di svilupparle*. It. Transl. in *Didattica del Movimento*, 42/43, 60-82, 1986.
- Bruner, J.S. (1964). *Dopo Dewey. Il processo di apprendimento nelle due culture*. Roma: Armando.
- Ceciliani, A. (2018). Dall'Embodied Cognition all'Embodied Education nelle scienze dell'attività motoria e sportiva. *Encyclopaideia – Journal of Phenomenology and Education*, 22, 11-24.
- Clark, A. (2009). *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*. Ox-

- ford: Oxford University. Published to Oxford Scholarship Online: January 2009. DOI:10.1093/acprof:oso/978019533213.001.0001;
- Colombini, S. (2015). La relazione educativa: un modello circolare. *Orientamenti Pedagogici*, 62, 1, 91-101.
- Danish, S.J. (1998). *Learning and teaching life skills through sport*. II° Encontro Internacional de Psicologia Aplicada ao Desporto e Actividade Física. Braga: Universidade do Minho;
- Danish, S.J. (1997). Going for the goal: A life skills program for adolescents. In Albee G. & Gullotta T., (eds.), *Primary prevention works* (Vol. 6, pp. 291-312). London: Sage Publications.
- Danish, S.J., Mash, J.M., Howard, C.W., Curl, S.J., Meyer, A.L., Owens, S., & Kendall, K. (1992a). *Going for the goal leader manual*. Virginia: Department of Psychology, Virginia Commonwealth University.
- Danish, S.J., Mash, J.M., Howard, C.W., Curl, S.J., Meyer, A.L., Owens, S., & Kendall, K. (1992b). *Going for the goal student activity manual*. Department of Psychology, Virginia Commonwealth University.
- Gardner, H. (2005). *Educazione e sviluppo della mente. Intelligenze multiple e apprendimento*. Preface by Galimberti U. Trento: Erickson.
- Heckman, J.J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour economics*, 19, 4, 451-464.
- Hellison, D. (2003). *Teaching responsibility through physical activity* (2nd ed.). Champaign, IL: Human Kinetics.
- Isidori, E. (2002). *La pedagogia come scienza del corpo*. Roma: Anicia.
- Isidori, E. (2009). *La pedagogia dello sport*. Roma: Carocci.
- Isidori, E. (2008). Pedagogia dello sport e valori verso un approccio critico-riflessivo. In Isidori E., Fraile Aranda A. (eds.), *Educazione, sport e valori*. Roma: Aracne.
- Isidori, E., & Fraile Aranda, A. (2012). Introduction. In Isidori E., Fraile Aranda A. (eds.), *Pedagogia dell'allenamento. Prospettive metodologiche*. Roma: Nuova Cultura.
- La Torre, A. (2016). Sviluppo motorio. In La Torre, (ed.), *Allenare per vincere. Metodologia dell'allenamento sportivo*. Roma: SDS Editor, School of Sport Editions-CONI.
- Lombardozi, A. (2001). Caratteristiche dei giochi sportivi. In Lombardozi, A., Musella, G., Balducci, F., & Barigelli, E. (2001). *Giochi sportivi (Sports games)*, (pp. 21-46). Padova: Piccin.
- Lombardozi, A. (2012). Il ruolo dell'allenatore in prospettiva pedagogica. In Isidori E., Fraile Aranda A. (eds.), *Pedagogia dell'allenamento. Prospettive metodologiche*. Roma: Nuova Cultura.
- Mantovani, C. (2017). Le competenze didattiche del tecnico sportivo. In Mantovani C. (ed.), *Insegnare per allenare. Metodologia dell'insegnamento* (pp. 305-333). Roma: School of Sport Editions-CONI.
- Maulini, C. (2019). *Educare allenando. Profili e competenze pedagogiche dell'operatore sportivo*. Milano: Franco Angeli.
- Maulini, C. (2006). *Pedagogia, benessere e sport*. Roma: Aracne.
- Maulini, C. (2014). *Progettare il benessere attraverso lo sport*. Indicazioni metodologiche e studi di caso. Milano: Franco Angeli.
- Milan G. (2001). *Educare all'incontro*. La pedagogia di Martin Buber. Roma: Città Nuova.
- Mussen, P. H., Conger, J. J., Kagan, J., & Huston, A. C. (1990). *Lo sviluppo del bambino e la personalità*. Bologna: Zanichelli.
- WHO (1998). *Health Promotion Glossary*. Ginevra: World Health Organization. Text available at: <http://www.sciencedirect.com/reference/345348>. Last consulted on: November 14, 2021.
- WHO (1993). *Life education skills education for children and adolescents in school*. Text available at: <https://apps.who.int/iris/handle/10665/63552>. Last consulted on: November 14, 2021.
- WHO (1986). *Ottawa charter for health promotion, First International Conference on Health Promotion*, Ottawa, 21 November 1986. Text available at: <https://www.european-sources.info/record/ottawa-charter-for-health-promotion-1986-first-international-conference-on-health-promotion-ottawa-canada-17-21-november-1986/>. Last consulted on: November 14, 2021.
- Pati, L. (1994). *Pedagogia della comunicazione educativa*. Brescia: La Scuola.

- Parlebas, P. (1997). *Giocchi e sport. Corpo, comunicazione e creatività ludica*. Torino: Il Capitulo.
- Pellerey, M. (2016). Orientamento come potenziamento della persona umana in vista della sua occupabilità: il ruolo delle soft skills, o competenze professionali personali generali. *Cnos Review*, 32(1), 41-50.
- Rossi, B. (1992). *Intersoggettività ed educazione*. Brescia: La Scuola.
- Teodorescu, L. (1981). *Teoria e metodologia dei giochi sportivi*. Roma: Società Stampa Sportiva.
- Varela, F.J., Thompson, E., & Rosch, E. (1991). *The Embodied Mind. Cognitive Science and Human Experience*. Cambridge: MIT Press.
- Verchošankij, Y.V. (1987). *La programmazione e l'organizzazione del processo di allenamento*. Roma: Società Stampa Sportiva.
- Wandzilak, T. (1985). Value development through physical education and athletics. *Quest*, 37, 2, 176-185.
- Wilson, M. (2002). Six view of embodied cognition. *Psychonomic Bulletin and Review*, 9, 4, 625-636.
- Weineck, J. (2009). *L'allenamento ottimale: una teoria dell'allenamento basata sui principi della fisiologia del movimento, con particolare riferimento all'allenamento infantile e giovanile*. Perugia: Calzetti-Mariucci.