

The benefits of Sports in Specific Learning Disorders

I benefici dello Sport nei Disturbi Specifici dell'Apprendimento

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Abstract

Recourse to the use of compensatory instruments in individuals with SLD, governed by Law No. 170/2010, has the purpose of making each subject an autonomous and independent entity, enhancing and increasing the abilities and skills of the same. These tools support the subject in the course of an otherwise complex service provided by the presence of the disorder. The use of compensatory tools allows the individual to best use his / her functions and resources, thus favouring his / her insertion into the social context. In this frame, sport takes on a key role as compensatory vehicle for strengthening and enhancement of the attitudes of individuals as well as their growth in the development of interpersonal relationships. The conduct of sports activities is a fundamental means for the transfer of skills and abilities whose mastery means greater certainty and control of their own means.

Il ricorso all'utilizzo degli strumenti compensativi nei soggetti con DSA, disciplinato dalla Legge n° 170/2010, ha lo scopo di rendere ogni soggetto autonomo ed indipendente, valorizzando ed incrementando le capacità e le abilità degli stessi. Tali strumenti sostengono il soggetto nello svolgimento di una prestazione resa altrimenti complessa dalla presenza del disturbo. L'utilizzo degli strumenti compensativi consente all'individuo di impiegare al meglio le proprie funzioni e risorse, favorendo, quindi, il suo inserimento nel contesto sociale. In tale ambito lo sport acquisisce un ruolo fondamentale quale veicolo compensativo di potenziamento e valorizzazione delle attitudini dei singoli soggetti oltre che di crescita nello sviluppo dei rapporti interpersonali.

Lo svolgimento dell'attività sportiva costituisce un mezzo fondamentale per il trasferimento di competenze ed abilità specifiche la cui padronanza si traduce in maggiore certezza e controllo dei propri mezzi.

Keywords

SLD; sport; physical activity; compensatory instruments; benefits.

DSA; sport; attività fisica; strumenti compensativi; benefici.

Introduction

Sports activity is a fundamental element in the field of physical, psychological and life-long individual relationships, playing a role that goes beyond the traditional benefits associated with it. In more recent years, sport has assumed an increasingly decisive and prevalent position in everyday life due to the widespread diffusion of the media, which have made sporting events usable to an ever wider audience, also for the intrinsic spectacle of competitions and events related to sport. Alongside these aspects, however, it should be emphasized that sporting activity has conceptually a broader value, which goes beyond the representative expression of the competitive exhibition, a value represented by the universal values that sport embodies and represents as adherence to the rules and the respect for the adversary, the sense of discipline and the principle of healthy and correct competition. These evidences have meant that the meaning of sport has extended beyond its natural boundaries, creating connections of a social, psychological, pedagogical and even political nature, which has enriched its contents. All this is confirmed by the UN initiative that in 2001 established the UNOSDP - United Nations Office on Sport for Development and Peace - which ratified the importance and the key role played by sport in the last decades, and also stigmatized as the development of sporting activity represents a highly effective tool to overcome political and ideological barriers. The message conveyed is that the concept of sport cannot be confined exclusively to its competitive and spectacular aspect, but must be recognized as a benefit with a high social impact able to overcome even ideological barriers, and in this sense, it can be considered as a real instrument of humanitarian support. This conceptual approach is fully justified by the effects that sports practice can produce, not only from a physical standpoint, but also on psychological and social aspects, considering that it is able to develop and increase skills and potential in the individual, encouraging the development of self-esteem and interpersonal relationships.

The practice of constant and programmed physical exercise is able to stimulate and develop in the subject potentials and attitudes determining his individual and relational growth. The motor activity, appropriately organized and planned, is able to influence the behavioural perspective of the individual, because he becomes able to direct his organizational strategy towards a specific goal and a specific result. Furthermore, physical activity amplifies the sense of self-efficacy, enhances the perception and awareness of being able to control one's own development, improving and increasing the ability to implement strategies to deal with particular conditions perceived as problematic. In this way, taking care of one's physical and psychological wellbeing through sport, allows one to modify and overturn a life scheme from within, creating greater awareness and new opportunities for individual growth, through the acquisition of new resources, and also through a better quality of interpersonal relationships. Sport teaches you to objectively evaluate your limits, redefine them positively, and transform them into new and unprecedented capacities, so that it becomes possible to accept and face difficulties and problems in a different light.

What said before is a conceptual framework that fully justifies the use of sport in more amplified ways, that is to say, as a tool and operational support, both in the wide range of disabilities, and in other circumstances where individual difficulties exist, linked to some and specific operational capabilities but not comparable to a real disability condition, as is the case of Specific Learning Disorders (SLD).

Basically it can be said that sport, considering its prerogatives and its practice, can contribute to increase and sustain a wide range of behavioural and psychical aspects, fundamental for the correct development of the individual with SLD, improving the path, the evolution and personal potential.

1. SLD Features

The term Specific Learning Disorders (SLD) refers to a heterogeneous group of neurobehavioral disorders that manifest themselves as typical and persistent difficulties in the acquisition and efficient use of reading, writing and the lack of mathematical abilities; they are chronic disorders that accompany the subjects throughout their development. Against this, individuals with SLD do not present any sensory disturbance, possess a normal intellectual capacity, are included in the normal school circuit, and enjoy a regular socio-cultural opportunity.

The most frequently encountered condition in individuals with this disorder is Dyslexia, a disorder related to the ability to read, which can occur with different degrees of severity. Its typicality is represented by the fact that the subject finds it difficult to learn to read fluently, as well as to decipher the texts and to expose the content, while fully understanding what is transmitted to him orally. In reality the dyslexic has difficulty in decoding words, or graphemes that represent the word. He also makes mistakes in writing by inverting the letters, he confuses the spatial relationships, finding, therefore, difficulty in exposing orally what he has read. A natural consequence of all this is that these subjects hardly read, with an inevitable relapse on their knowledge in general. It may also be associated with other disorders related to writing and the mnemonic function.

Dysgraphia is a condition in which the subject finds it difficult to write. The writing is disordered, slow and stunted, there is no proper organization of the letters on the line, the spelling errors are very frequent, there is difficulty translating the memorized ideas into a written language, all associated with poor command of gestures connected to mechanical action of writing. It is evident in the early school stages when students begin to learn writing. Dysgraphia can be associated with Dysorthography, which is characterized by the presence in the script of numerous errors, grammatical types, repeatedly made, and characterized by omitting some letters from a word, by the non-use of diacritical marks, such as accents, and by exchanging sounds with words. Naturally, the association of Dysgraphia and Dysorthography realizes a more complex picture that hinders in a deeper way the form and the structure of the writing and its contents.

The Dyscalculia, finally, is a specific mathematical learning disability characterized by difficulty to understand the concepts related to the numbers, and the difficulty in the use of symbols and functions used in mathematics. Sometimes people suffering from this disorder does not include simple quantitative concepts, such as larger or smaller, and fails to relate a specific numerical symbol with the corresponding words. It includes the reasoning which is upstream of a mathematical problem, but is not able to solve it by manipulating the appropriate tools, such as arithmetic.

However, the subjects affected by SLD present problems that go beyond those related to the difficulties of reading, writing, mathematics and organization, because they experiment more often than not, in parallel, feelings of inadequacy also associated with feelings of confusion and frustration. A work performed poorly, or in an unsatisfactory way, can induce the subject to perceive himself as a person who is not up to the task and unable to carry out his task effectively, which generates anxiety and a reduction in self-esteem. They constantly experience the difficulty in carrying out school work, with consequent loss of confidence in their own resources, thus creating a negative feedback that further interferes with the learning process, reinforcing the cycle of failures and chronicling the perception of inadequacy. The dissatisfaction, the disappointment, the discomfort, which are associated with the learning disability, can lead to psychological difficulties such as anxiety and depression, so in these cases it is perfectly appropriate to provide adequate compensatory tools, as on the other hand provided by the legislation on the subject, instruments whose main purpose is to ensure full autonomy to the student affected by SLD, giving him/her the most appropriate means and solutions.

We have previously highlighted the advantages and the benefits related to the sport that, physical benefits apart, extend in other areas such as behavioural, psychological and social. Sport can have a positive effect on self-esteem, sense of inadequacy, interpersonal relationships, increasing trust in oneself, in one's own means and abilities. It appears, therefore, fully justified the use of sport as an

instrument for adjustment in the context of the subjects' initiatives in support of SLD.

2. Sports as a compensatory tool

The compensatory tools used for individuals with SLD are obviously not intended to simplify the course of their studies or offer particular advantages. Their goal, rather, is to provide adequate devices to put the subjects with SLD on the same level as their peers.

The use of these tools is governed by Law No. 170/2010, and is intended to make the subject affected by SLD autonomous, enhancing skills and abilities that otherwise would have emerged with greater difficulty. Their use allows the best use of the deficit functions by acting directly on them, or indirectly as a support for storing and attention.

The psychological / emotional profile of those affected by SLD is characterized by a complex of perceived sensations that give rise to a sense of inadequacy, which can lead to frustration and discouragement, which in turn can generate anxiety and depression. The perception of being inadequate, with its consequences, is chronic because it is continually tested, considering that the individual with SLD shares with the other peers the same daily experiences and the same lived reality, in particular the scholastic reality. Cohabitation generates an inevitable comparison that best highlights the shortcomings. The continuity of this condition produces a negative perception of their own image, which appears as unable to address adequately their tasks. All this reduces self-esteem by realizing a self-sustaining picture downstream.

If it is now well known that sport represents a fundamental element and a valid support in the vast sphere of disability in general, because it is capable of inducing important changes in the way in which the subject reads and interprets his own special condition, there are also numerous and clear scientific evidence that demonstrates how regular participation in physical activity is beneficial for people with learning disorder. In many cases, in fact, it has been found that practicing physical activity continually increases psychomotor development, a process that allows the acquisition of specific motor, cognitive, relational and emotional skills, and this regardless of the type of sport practiced. However, for a more complete evaluation of how good the sport is and suitable as a compensatory tool, it is appropriate to consider in more detail all its potentialities, expressed through the beneficial effects exerted on the individual structural components of the individual, such as self-efficacy, motivation, the perception of effectively controlling one's own development and social reality and the ability to put into practice, at different times, the most appropriate strategies.

Self-efficacy is the awareness of being able to manage circumstances and contexts, and to be able to operate in them in a timely and efficient manner. This same awareness can contribute to the birth or consolidation of motivations and aims where the motivation, in particular, constitutes the behavioural aspect that induces the individual to achieve certain objectives, representing in this sense the necessary and essential element at the base of each aware personal choice. Self-efficacy and motivation, therefore, in a fuller sense, mean that the commitment to sporting activity also induces in the subject the knowledge of wanting to achieve goals, including those of personal growth. The sport practice, in essence, affects the way in which an individual perceives the control of their development and their own reality in the social context, arousing the awareness of being able to decide their own actions and the ability to act actively on events, rather than attributing to the unpredictable the predominant role in the possibility of achieving the pre-established result. From this also comes a greater ability to handle stressful situations and circumstances, or perceived as such. All this, finally, is further strengthened by the sports ability to transfer skills and specific skills, whose mastery means greater certainty and control of their own means.

However, on the other hand, it is right to underline how the subjects affected by SLD possess typical characteristics that distinguish their managerial assets. It is in fact known that this type of subjects have greater problem solving skills, possess a more strategic and multidimensional vision of events, frame events according to different perspectives, reason dynamically using unpublished connections and finding original solutions characterized by the use of a

marked creativity. For the record, the characteristics listed have helped to bring out excellences in competitive sports as in the case of world-class athletes such as Magic Johnson, John Phelps, Muhammad Ali who, despite presenting problems related to learning, have distinguished themselves in their own field.

It is known that the body and the movement favour and integrate the learning process in general, and this in itself can represent an important theoretical assumption that validates the use of sport as a compensatory tool in the SLD. Its value must also be read in a perspective which refers to the entirety of its subject, and the mode of transmission and transfer of its principles. Sport spreads its contents in a direct and active way, which makes the assimilation of rules and values more effective, producing, inevitably, a widely shared participation. Sport practice, therefore, realizes a privileged field of development of human relationships and, naturally, favours the process of personal growth of the individual affected by SLD who, having experienced a sense of inadequacy and unsuitability, is projected into a new dimension more adherent to the real value of one's own person.

As is known, the SLD accompany the subject throughout the course of his/her life, thus constituting an obstacle in the workplace, where it is possible to find patterns similar to those experienced in school age. However, subjects with SLD who previously used physical activity as a support tool are probably more facilitated, both because the diagnosis of the disorder was made early, and because, based on their experience, they are more capable and inclined to develop personal strategies. In this perspective, sport activity acquires greater value as a compensatory tool because it guides the subject in the ability to recognize, enhance and strengthen his skills and qualities to be enjoyed in the most varied and different fields.

Conclusions

The world of sport and physical activity are especially important to persons with Specific Learning Disorders as they contribute to improving skills, strategies and abilities to deal with different conditions perceived as complex and problematic. Sport can therefore be identified and recognized as a compensatory element, advocating and supporting the subject toward growth paths made of autonomy, capacity, independence, self-determination and awareness. Practicing a sport allows to identify, explore and rediscover one's abilities, to redefine them and gradually build an image of oneself that is more effective and efficient.

Sport practice increases and reinforces cognitive, emotional and relational skills, positively influencing the ways in which an individual perceives himself, his relationships and his context; increasing the awareness of being able to possess a greater capacity to handle complex problems and circumstances, or perceived as such. All this, finally, is further strengthened by the sports ability to transfer skills and specific abilities, whose mastery means greater certainty and control of their own means.

Sport represents, therefore, the possibility and the opportunity for every subject with SLD, to recognize themselves through a vision and a dimension more in line with their own value and abilities.

References

- AID Associazione Italiana Dislessia, Comitato Promotore Consensus Conference. *Disturbi Evolutivi Specifici di Apprendimento. Raccomandazioni per la pratica clinica di dislessia, disortografia, disgrafia e discalculia.* Erickson, Trento.
- Bandura, A. (2000). *Autoefficacia. Teorie e applicazioni.* Erikson Edizioni, Trento.
- Cei, A., (1998). *Psicologia dello sport.* Il Mulino, Milano

- Ianes, D. (2005) *Bisogni Educativi Speciali e inclusione*. Erickson Edizioni, Trento.
- Ianes, D., Cramerotti, S. (2015). *Alunni con Bisogni Educativi Speciali*. Erickson, Trento.
- Isidori, E. (2009). *Pedagogia dello sport*. Carocci, Milano.
- Isidori, E., Fraile, A. (2008). *Educazione, sport e valori. Un approccio pedagogico critico- riflessivo*. Aracne, Roma.
- Liperini, G., Testi, A. (2017). *La famiglia BES. Una visione clinica sociale e relazionale*. Armando Editore, Roma.
- Lyon, G.R., Shaywitz, S.E., Shaywitz, B.A. (2013) *A definition of dyslexia*. Springer, Vol 53, Issue 1, pp 1-14.
- Spinelli, D., (1997). *Psicologia dello sport e del movimento umano*. Zanichelli, Bologna.
- Vehmas, S., (2010). *Special needs: a philosophical analysis*. International Journal of Inclusive Education, Vol. 14, n. 1, 87-96.
- Vuijk, P.J., Hartman, E., Mombarg, R., Scherder, E., Visscher, C. (2011), *Associations Between Academic and Motor Performance in a Heterogeneous Sample of Children With Learning Disabilities*. Journal of Learning Disability, vol. 44, n. 3, pp 276-282.
- Westendorp, M., Hartman, E., Houwen, S., Smith, J., Visscher, C. (2011) *The relationship between gross motor skills and academic achievement in children with learning disabilities*. Research in Developmental Disabilities, vol 32, issue 6, pp 2773–2779.