

PROMOTE EDUCATIONAL DEVELOPMENT OF STUDENTS WITH SLD IN THE SCHOOL AND UNIVERSITY: THE ROLE OF SPORT

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ABSTRACT

This research work aims to identify and analyze a performing educational and social strategy able to deal with the critical aspects relating to Specific Learning Disorders (SLD) in the main scholastic contexts such as School and University. In this regard, a set of key determinants has been suggested to define and develop operational management solutions at different educational levels and identifies in the sporting activity a tool of universal support able to achieve multiple benefits for supporting students with SLD.

Keywords: Sport, Specific Learning Disorders (SLD), Didactic-Educational Contexts School, University.

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Introduction

In Italy, one student out of five, during his/her educational path from the early years of school up to University, faces difficulties in learning requiring the need of help by experts. This observation allows us affirming that, in Italian country, there are roughly 10 million students needing didactic support; among them, in particular, almost two million show the so-called Specific Learning Disorders (SLD).

Learning disorder concerns that part of students where the difficulty, particularly serious and constant over time, cannot be easily attributed to contextual or temporary factors. Specifically for this reason, it is fundamental to frame a strategy to deal with the problems found after the identification of specific learning disorders, in order to ensure an appropriate didactic path at all levels, and especially a personal growth for the individual. The school and university context must avoid the occurrence of SLD individuals' exclusion situations, and propose operational programs which can ensure them an inclusive development both at educational and social level.

In that regard, it needs to point out that the sports industry can provide a substantial contribution for the social, educational and personal growth of SLD students.

The relationship between SLD and Educational Contexts

The incidence of difficulties found at school on the population that attends compulsory school is equal to an 18-19%, while, as for specifically that relating to cases of SLD students, ranges between the 4-6%^(1,2).

At this point, it is important to point out what are specifically the main SLD identified^(3,4,5):

- Dysgraphia: it is a specific difficulty realizing graphemes.
- Dysorthography: it is a specific disorder in writing correctly (transcription process between phonology and graphemic representation of the word, frequent grammatical and spelling mistakes).
- Dyslexia: it is a specific disorder in the reading speed and accuracy (automation of the symbols decoding process).

• **Dyscalculia:** it is a weakness in the structuring of the numerical cognition components (basal numeric intelligence, quantification mechanisms, etc.) and/or difficulties in the executive procedures (reading, writing, putting numbers in column) and/or difficulties in computation. Despite a standard IQ, the ability of these children to learn alphabetical and numeric codes remains limited. This means that almost all SLD people manage to learn how to read, write and make computations, but not in such an automated way as their peers do.

In this regard, School and University work in relation to some major reference standards, which provide the basic guidelines on which to structure an appropriate educational management plan for these critical issues, including:

Presidential Decree No. 275/99, "Regulations concerning the autonomy of educational institutions" - Note of the Ministry of University and Research No. 26/A4 dated January 5, 2005, "Initiatives related to dyslexia" - Note of the Ministry of Education no. 4674 of May 10, 2007 "Learning disorders - Operational guidelines" - Guidelines for the kindergarten and first-cycle education curriculum - M.D. of July 31, 2007 - Draft Law of May 19, 2009 - Presidential decree No. 122 of June 22, 2009 - Law No. 170 of October 8, 2010 "New rules on specific learning disorders in school contexts" - M.D. No. 5669 of July 12, 2011 - Guidelines for the right to education of SEN students of 12 July, 2011 (annexed to the M.D. No. 5669/2011)

More specifically, it should be noted that, according to Law No. 17/1999 integrating and amending the Framework Law No. 104/1992, all Universities are required to establish the figure of a Rector's Delegate for Disability, which manages the activation of supporting services of study and university life activities for students with disabilities and with SLDs, in order to offer them equal opportunities of education, study and participation in University activities.

Educational and Didactic Strategies to develop an effective offer in Schools and Universities

Both the school and the university context need an effective path able to limit the weak point of SLD students, and to promote and enhance their educational and social development in an inclusive system. In this regard, it is essential to set up an

operative approach in educational institutions ensuring that SLD-diagnosed students can take advantage of appropriate dispensatory and compensatory measures of didactic flexibility. Among the essential compensatory tools, depending on the peculiarities of the disorder, are included^(1, 6): table of the months, alphabet and various characters; Pythagorean table; table of measurements and geometrical formulas; calculator; recorder; computer with video-writing programs including spelling checker and speech synthesis.

As for the dispensatory measures, while requiring an individual assessment of the extent and profile of the difficulty, it is essential to take into account the following possible operational maneuvers^(1, 7): Dispensation from reading aloud, fast writing under dictation, use of the dictionary, mnemonic study of the tables; Dispensation, where necessary, from the study of the foreign language in written form; Programming of longer times for written tests and home study; Organization of scheduled oral tests; Evaluation of written and oral tests in ways that take into account the content and not the form.

Obviously, other tools may also be used during the school process, based on the student's development phases and the outcomes obtained; moreover, for the purposes of the effectiveness of the management actions, it is essential that the measures adopted (whether compensatory or dispensatory) are periodically subject to monitoring and evaluation based on the objectives pursued. At the same time, the teaching methodology used must include the provision of individualized and personalized didactics, with effective and flexible forms of school work that also take into account every subject's peculiar characteristics.

Further aspects of considerable importance that must be taken into account in the management of the didactic and educational proposal, which do not neglect the goal of a social and inclusive development, are certainly^(1, 7): Learning assessment phase; Increased communication and collaboration between family, school and health services during the education and training path.

In fact, SLD students must be provided with adequate forms of assessment and testing; it could often be useful to prepare a differentiated assessment both in written and oral tests, in ways that take into account the content and not the form; maybe mistakes, such as those related to the spelling, can be highlighted but not assessed, limit-

ing a weak point due to the disorder but preserving learning. Assessment through the adoption of the compensatory and dispensatory methodological-didactic tools, deemed to be most appropriate, must be related to the students' abilities and difficulties so as to facilitate awareness of their abilities and the related improvements. During the assessment, therefore, the same methods applied to the didactics in the context of individualized and personalized planning are employed.

Then, as regards the increased collaboration among the SLD management stakeholders at school, they must aim both at fostering academic success and at preventing blocks in the students' learning process, by facilitating their full social and cultural integration and reducing educational and emotional disadvantages for these subjects, thus favoring their complete education.

With reference to the university environment, the assumptions on which effective educational and didactics actions for these students should work, are^(8, 9): Welcome and Entry-level guidance. The Guidance and Tutoring Sector should offer individualized interviews to encourage the conscious choice of one's own university path. Furthermore, an initial interview with the student could be envisaged to identify the types of support most suited to the needs, and related to the Specific Learning Disorder - Classroom support - Technological didactic aids. SLD students should have the possibility to request specific technological tools, necessary to guarantee and support a productive lesson attendance and a performing examination - Individualized examinations. SLD students should take the exams in an accessible way according to their needs, prior agreement with the teacher - Material in accessible format - Tutoring. The support of experts, whose goal is to make the SLD student progressively autonomous.

Therefore, tutors should carry out activities of accompaniment, classroom support, development of accessible material, intermediation with University structures and their teaching staff, recovery of educational material, etc. In addition, proposals for group didactics and peer tutoring could be encouraged as inclusive and educational methodological strategies. Furthermore, it would be appropriate to structure a job orientation phase, perhaps in collaboration with the University Placement Service, to offer an integrated system of services aimed at supporting the SLD students in analyzing their attitudes, motivations and competences, in

order to elaborate a professional project consistent with their study course and its specific characteristics.

The support of Sports for SLD Students

Students, and people in general, with Specific Learning Disorders often find difficulties in socializing within a peer group, as well as in motor coordination: it is therefore very important to create conditions for them to experience positive and socializing experiences, in contexts that are extracurricular and group like the sports one⁽¹⁰⁻¹³⁾.

A problem that, however, puts SLD young people at disadvantage is due to the fact that, for practicing sports, it requires the direct intervention of attention system, motor coordination, posture control, and other often deficit aspects in these individuals^(14, 15, 16).

Despite this, it is important to take into account two fundamental factors

1. *The specific characteristics of these people can represent unique and useful resources to make them excel in sports:* SLD people often have an overall picture, a global perception, and can "interpret" the situations more widely. They think in a dynamic way, creating unusual connections that others can hardly develop, and have analytical skills, based on different perspectives from the traditional ones that lead them to face the "tasks" with different approaches and methods. In addition, very often, their learning modality is multidimensional, since it makes use of all the senses, and causes them to process information in a global, rather than sequential, way. They are creative and easily develop new ideas and solutions; this allows them better expressing their potential in a dynamic, constantly changing context, just like the one that takes shape during sports activities^(8, 9). Dyslexic athletes, such as the boxer and heavyweight champion Muhammad Ali, the great basketball players Michael Jordan and Magic Johnson, the rowing champion Steve Redgrave, represent concrete examples of what we have analyzed.

2. *The natural educational, social and inclusive potential of the sport these students could benefit from:* sport plays a fundamental social role for its natural characteristics, representing a tool for education and an extraordinary catalyst of positive universal values. In fact, it is a motor of inclusion, participation and social aggregation, especially for

subjects showing difficulties in other social contexts, such as school and university⁽¹⁷⁻²⁴⁾. Precisely because of this it is assumed that, for SLD students, practicing sports activity (regardless of the possibility of gaining the highest levels) can be an effective tool supporting the development of self-esteem, autonomy and interpersonal skills of these subjects, indispensable requisites for a consequent improvement of the didactic learning skills also in the school and university contexts.

Conclusions

School and university realities must be able to guarantee an effective teaching offer to all, especially to those who show objective and certified situations of difficulty, such as students with Specific Learning Disorders.

In this regard, specific educational perspectives have been proposed, which can favor a didactics, and at the same time, social and inclusive development in the main contexts of the Italian education, from primary school to university.

Moreover, in the practice of sports by SLD students, an important tool has been identified in an environment that is not purely the strictly educational one, able to effectively foster personal growth. In fact, sport contributes significantly to the enhancement of the specific characteristics of these people, and the consequent increase in their self-esteem level and in their relational skills. This implies, in turn, a greater predisposition to school and university learning, favoring the overall development of the individual.

References

- 1) Bollani, A., Cismondo, D., Cardozo-Uz, P. J., Nola, M., Lecce, S., & Palladino, P. (2017). La scuola fa bene a tutti: difficoltà e disturbi specifici dell'apprendimento in un contesto di svantaggio socio-economico e culturale. *Psicologia clinica dello sviluppo*, 21(2), 329-337.
- 2) Morlini, I., & Scorza, M. (2017). Studio dell'incidenza della dislessia nelle scuole elementari e medie in Emilia Romagna e Lombardia. *Statistica & Società*, 5-5.
- 3) Cornoldi, C. (Ed.). (2007). *Difficoltà e disturbi dell'apprendimento. Il mulino*.
- 4) Kavale, K. A., Forness, S. R., & Lorschach, T. C. (1991). Definition for definitions of learning disabilities. *Learning Disability Quarterly*, 14(4), 257-266.
- 5) Tressoldi, P. E., & Vio, C. (1996). Diagnosi dei disturbi dell'apprendimento scolastico: dalla segnalazione alla diagnosi funzionale. Centro studi Erickson.
- 6) Capuano, A., Storace, F., & Ventriglia, L. (2013). *BES e DSA: la scuola di qualità per tutti*. Libriliberi.
- 7) Turnbull, A. P. (1995). *Exceptional lives: Special education in today's schools*. Merrill/Prentice Hall, Order Department, 200 Old Tappan Rd., Old Tappan, NJ 07675.
- 8) Ghidoni, E., Genovese, E., & Guaraldi, G. (2015). *Giovani adulti con DSA: Diagnosi, aspetti psicologici e prospettive di sviluppo*. Edizioni Centro Studi Erickson.
- 9) Smith, T. E., Polloway, E. A., Patton, J. R., Dowdy, C. A., & Doughty, T. T. (2015). *Teaching students with special needs in inclusive settings*. Pearson.
- 10) Di Palma D, Raiola G, Tafuri D. The strategic contribution of sport to the management of diversity. *Sport Science* 2017; 10 (1), 40-43.
- 11) Raiola G, Tafuri D, Di Palma D. Sport & Diversity Management. *Sport Science* 2017; 10 (1), 51-54.
- 12) Orio F, Tafuri D, Ascione A, Marciano F, Savastano S, Colarieti G, Orio M, Colao A, Palomba S, Muscogiuri G. Lifestyle changes in the management of adulthood and childhood obesity. *MINERVA ENDOCRINOLOGICA* 2016; vol. 41, p. 509-515.
- 13) Tafuri D, Di Palma D, Raiola G. The role of the diversity manager for valuing diversity in sport. *Sport Science* 2017; 10 (1), 70-74.
- 14) Jelle Vuijk, P., 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 disabilities*, 44(3), 276-282.
- 15) Razuk, M., & Barela, J. A. (2014). Dyslexic children suffer from less informative visual cues to control posture. *Research in developmental disabilities*, 35(9), 1988-1994.
- 16) 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*, 32(6), 2773-2779.
- 17) Di Palma D, Tafuri D. Special needs and inclusion in sport management: a specific literature review. *Sport Science* 2016; 9(2), 24-31.
- 18) Di Palma D, Raiola G, Tafuri D. Disability and Sport Management: a systematic review of the literature. *Journal of Physical Education and Sport ® (JPES)* 2016; 16(3), Art 125, pp. 785 – 793.
- 19) Raiola G, Di Palma D, Tafuri D. Social inclusion throughout physical education. *Sport Science* 2016; 9, 2: 49-53.
- 20) Di Palma D, Ascione A, Peluso Cassese F. Management of sports activity and disability in Italy. *Sport Science* 2017; 10 Suppl 1: 18-22.
- 21) Di Palma D, Tafuri D, Ascione A, Raiola A. Social, Tourism and Educational development through Sport. *Journal of Physical Education and Sport ® (JPES)* 2018; 18 Supplement issue 1, Art 67, pp.473 – 478.
- 22) Belfiore P, Di Palma D, Ascione A. (2018) Adapted Physical Activity (Apa) For The Tutelage Of Patients With Type Ii Diabetes. *Acta Medica Mediterranea* 2018; 34: 1257. DOI: 10.19193/0393-6384_2018_5_193.
- 23) Di Palma D, Ascione A, Belfiore P. (2018) Experimental Approach Of Water Polo Training To

Improve Psycho-Physical. Acta Medica Mediterranea 2018; 34: 1253. DOI: 10.19193/0393-6384_2018_5_192.

- 24) Ascione A, Belfiore P, Di Palma D. (2018) Sports Program To Promote The Wellbeing Of People With Disabilities. Acta Medica Mediterranea 2018; 34: 1261. DOI: 10.19193/0393-6384_2018_5_194.

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