

## SOCIAL INCLUSION AND EDUCATION THROUGH SPORT AND TECHNOLOGY

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*Review paper*

### Abstract

*The purpose of the paper is to analyze how the sport, also supported by technological innovations, is consolidated as a reality able to favor both educational processes, that the phenomenon of social inclusion. In fact, over time this sector has acquired more and more importance even under the aspect of social ethics and therefore of inclusion and education. It is also important to emphasize that the technology is able to amplify all inclusive and socio-educational benefits sport for the collectivity.*

**Key words:** *sport, inclusion, technology, education, social aspect.*

### Introduction

Sport is of great importance to millions of people around the world, it has a nearly global diffusion and is characterized by many aspects that go beyond its natural sphere, giving it complex features that can also intercept the daily life of all of us and condition the nature of our social and educational relationships. In order to evaluate all the characteristics of this phenomenon and what revolves around it, we must consider the whole range of aspects related to the world of sport, which are stratified and differentiated according to the approaches and ways of interest related to it. Sport in the time has become increasingly a social phenomenon with a strong propensity toward the educational dimension. Moreover, educate through sport gives the opportunity to develop inclusive processes toward weak categories of people, such as the disabled, in all social sectors including the school. In this perspective it was interesting to analyze how technological innovations are capable of increasing the social and inclusive benefits of sport on people, especially in disadvantaged social and health situations.

#### *The social value of sport*

Sport can be approached in various ways, for example, in a canonical way through direct, agonistic, amateur or occasional sports practice, in this regard Intensity training, talent, and an adequate diet represent the crucial factors for the success of athletes (Mazzeo et al, 2016), but also more indirectly through the media and their widespread diffusion, corresponding to an equally great and widespread interest in information. Furthermore, there is also a specific dialectics linked to these events, which starts from the specialized press but that involves the simple fans too. All this is projected into a dimension that has no geographical or cultural boundaries (Bailey, 2005). Only in the last centuries it turned to more organized and structured competitive activities with real regulations, but we still have to wait for the 19th century, above all in England, for the beginning of modern sport as we mean today, with

the birth of disciplines such as football, rugby, tennis, destined to become extremely popular afterwards. The latest evolutionary step has taken place in relatively recent times, when the popularity and spread of sport has amplified throughout the world, bringing its spectacularization to the highest level. This was a progressive process of radical change that has turned an activity, originally connected and devoted to leisure, into a phenomenon that has taken on much more complex features: modern sport has definitively affirmed itself as a mass phenomenon and, as such, has inevitably assumed a very large social value that is also linked to other issues, including disability. However, the roots of the sport/disability pair are not recent, since the inclusion of disabled people in a sports environment dates back to Stoke Mandeville Hospital's experience in the Forties of the last century, thanks in particular to Ludwig Guttmann's intuition and work; thanks to it, there has been the emergence of sports competitions for people with disabilities.

This initial experience showed that, thanks to the motivations conveyed by sport in the traumatized young people, socialization became more successful, good psychological recovery was achieved and, at the same time, it was possible to optimally develop the residual skills: we are certainly faced with the first example which shows how sport can serve the world of disability (Zanobini & Usai, 2016). The success of these first experiences led to the creation of the first games for the disabled that took place at Stoke Mandeville; In this context we can find the discipline of the wheelchair basketball used from the first competitions by Guttmann himself, and included as a specialty since the early Paralympics held in Rome in 1960. Sport, thanks to its characteristics, has the ability to permeate and "penetrate" society, and this changes its natural boundaries by turning it into a complex entity with its original perspective that, through its interaction mechanisms, can address originally social issues

such as disability, and find new and effective solutions (Farinelli, 2005; Isidori, 2009; Isidori & Fraile, 2008). In fact, the benefits associated with sports are unquestionable, since sports practice not only cultivates physical well-being, but also that psychological, the emotional control, the development of personality and, last but not least, the social relationships. These aspects should be also seen from the educational point of view as sport, practiced from adolescent age, promotes emotional stability and the development of cognitive skills, improves self-esteem, diversifies learning strategies, enhances self-control and the ability to manipulate information, develops the "problem-solving", and moreover, last but not least, represents the most important socializing element: we can say that sport reflects society and society reflects sport, and if this is true, if there is a reflection symmetry between these two entities, an important point is certainly represented by the social participation that is achieved through sport, since the latter has the immense strength and ability to shape values and convey awareness (EC, 2007; Spinelli, 1997).

This, of course, applies in any case and for any sports discipline, but it is likely that for team sports it becomes even more evident and incisive (Montesano, Tafuri & Mazzeo, 2013). The sports disciplines organized in teams have specific features, because in this type of discipline there is a group of people who have to interact with each other in a coordinated and targeted way, thus representing a simplified version (but reproduced quite faithfully) of the wider sociological concept of group. People who form part of a group and who are part of a team must act according to certain characteristics such as interaction between them and mutual influence, and must observe certain rules, such as the respect for roles. All this creates a unique, original and peculiar set, which is also achieved through the mechanism of cohesion, that is, the relationship between the various members. This latter aspect is of great importance and has a considerable impact on the collectivity of the group itself, and theoretically, even at extra-sport level. In the light of what has been said, sport can be a link not only with social reality in general, but also with the educational reality and with the social aspects and inclusive problems of the world community.

#### *The development of the sport toward the educational dimension*

Sport has acquired over time a growing importance as an educational and training tool. In Europe the social and educational perspective of sport has gained importance in official documents only from the late 90s. The official entrance of sport among the European priorities dates back to 2007, when the EU operation Treaty ruled that the Union shall contribute to the promotion of European sporting issues, taking into account its specific nature, its structures based on voluntary activity and its social and educational function (EC, 2007). "Sport", without distinguishing whether individual or

collective sports, exists in the collection of the information daily received by the child, the teenager and the adult. The new models of research in the field of education have, for a long time, insisted on the need for a comprehensive individual training at intellectual, motor, emotional, social, physical and body levels. Not surprisingly, the role and the importance of sport, for example, in Anglo-Saxon universities is already well established (Mari, 2007; Farinelli, 2005). Aspects of sport must therefore normally be integrated, such as artistic, economic, political, educational to the educative process in order to prepare the student to fully become a citizen. Sport refers to a system of values extremely compatible with the values of the education system; there are, for example, personal growth, dialectic of the individual and the group within the team, participation in a social reality which has its own rules and that one must learn and apply later, the feeling of belonging to a community.

The calm of the "realized work" is opposed to the athlete's research for something more, both from their body and from their actions; In fact, in their performances they tend to reach the borders of their ability to highlight and explore all the virtuality within themselves (Raiola et al, 2016). Isn't it one of education main aims? Educating also means to "lead outside ...", "bring farther", going beyond what the legacy deposited in us, creating new possibilities, creating a brand new man. School sports can serve as a model to the classic school in this area (Isidori, 2012; Isidori & Fraile, 2008). So sports training and intellectual formation find themselves using same methods. Family is for the child a differentiated environment for age, rank, and status of each of its members, while at school the child is in a group of peers led by an adult. Too often this peer group is the juxtaposition of subjects, not constituting a group having its life, its dynamics, its structure, its evolution and, thus, the school is not able to fulfill the role of socialization which should provide for total education.

Sport, particularly team one, is one of the most effective forms of this socialization: everybody have their role to play, their place and their function, available for anybody; the individual is located in relation to others, they act as a function of the others and their personal value is related to the community; hence the double concern for personal growth to be an active element of the group, and to better serve the community to which one belongs. This is one of the essential purposes of education: developing the individual in his individual and social components, creating a citizen with personal wealth to be put at the service of society; confirming even more the educational value inherent to sport (Light & Dixon, 2007). Still, the practice of a sport must comply with a number of rules that you have to know, learn and apply; practicing a team sport means respecting the rules of the game, organizing self conduct and that of the team within this institutional framework of which borders are known and all the possibilities must be explored in order to

know where personal freedom begins and ends. Sport, so, in the midst of an educational perspective, contributes to the understanding of the necessity of having a rule for every human social activity and the importance of accepting to learn it and to know how to apply it and use it (Di Palma et al, 2016). Through sport there is the establishment of new forms of relations, exchange, and dialogue; To date, in fact, shaping the human being as a whole, developing all its virtuality, creating in him new possibilities implies physical education and sport to fully engage education (Zhong-Gan, 2005). Physical education and sport should not be considered merely as conditions for greater psychic life or actions necessary for the proper functioning of the brain. These are, by now, educational components that must be integrated to the whole contemporary educational action, even able sometimes to introduce educational activity forms totally unknown to classical education.

#### *Support of technology in the sport to promote inclusion*

New technological tools are rapidly becoming part of our everyday life, both in the social and professional relationships. At the same time, they involve the life plans of people with disabilities, and also/especially in education/training contexts and in those sports ones. The high-tech solutions have expanded the possibilities offered by the Assistive Technologies (AT) to the development of autonomies (Besio, 2005; Salend, 2015). In sports, like at school, the effective management of technological innovations and the related hardware and software can encourage the participation of the disabled athletes and students in learning paths, allowing for the elimination of those barriers of access that increase the gap with the fellow students. The use of technologies for disability in educational contexts addresses simultaneously didactic-methodological and technical-management issues concerning the choice and use of the devices. These seem to be strong at least in three aspects (Starcic, 2010):

- Motivation;
- Accuracy;
- Adaptability.

In fact, the use of technological devices, thanks to the flexibility that characterizes them, allows for the customization of the educational processes and of the training techniques, playing on everyone's learning styles and rhythms (Besio, 2005; Calvani, 2012; Lage, et al., 2000). In addition, the European Commission itself finds in technology an effective instrument to support educators in the difficult task of customizing learning, making the teaching activity cooperative, focusing on autonomy and on the development of skills, also in extremely heterogeneous contexts and in the presence of students and athletes with special needs (European Commission, 2011). The literature shows how inclusive didactics provides an important basis for guaranteeing equal opportunities to people with special needs in all

aspects of their lives; it requires flexible didactic systems that can satisfy the different, and often complex, needs of every athlete. The types of practices in social contexts supporting the inclusion of individuals with special needs, such as people with disabilities, include (Foley & Ferri, 2012; Salend, 2015; Starcic, 2010):

- Cooperative Teaching;
- Cooperative Learning;
- Problem solving through cooperation;
- Heterogeneous groups;
- Systematic monitoring and assessment;
- Programming and assessment of the work of every student.

The initiatives aimed at the inclusion of people with special educational and sports needs can be considered an extension of the principle according to which school and sport should frame the special needs of every student and athlete. Requests addressed to teachers and educators are increasingly demanding: they work with groups of students that are much more heterogeneous than before (in terms of mother tongue, gender, ethnicity, religious membership, ability etc.); therefore, educators are required to manage their didactic approach by taking advantage of the opportunities offered by new technologies, so to meet the needs of a teaching and training strategy adapted to help students become autonomous in lifelong learning. Technologies have enormous potential to support the autonomous learning, the collaborative construction of knowledge and the skills development; they represent an important reality in the inclusive education process of the main social contexts such as school and sport (European Commission, 2011).

In fact, among the transversal application fields of special didactics there is also the topic of the development of new technologies and training tools and, in this perspective, the innovations are linked to the development of new forms of didactic communication and learning of motor skills, in order to improve the physical conditions also in individuals with disabilities and/or medical pathologies (Montesano et al, 2013). This is done through the opportunity to express new specific movements that the technological tool allows to perform by involving various muscle groups and consolidating the movement patterns that the athlete has available while practicing the sports activity (Bosco, 2000; Tous-Fajardo et al, 2006; Wilson & Clayton, 2010). Finally, it is important to consider that, especially in the case of subjects with disabilities, the opportunity to enhance the athletes' sport performance helps amplify, as a consequence, the known benefits on the psycho-physical state and on the social inclusion that sport can provide (Di Palma, Raiola & Tafuri, 2016). An appropriate and efficient use of the technological innovations grants the opportunity to foster the development of the inclusion phenomena for disabled people, and for any category in a socially disadvantaged situation.

## Discussion and conclusion

The spread of sport, the popularity and visibility it enjoys, make it a unique phenomenon that fatally ends with having precise social developments.

The dimensions of this phenomenon are such that the interest it is able to attract overlaps its primary content, in order to move to a more general social plan that makes it turn into something complex: it becomes an expressive manifestation, a lifestyle, a behavioral model, a communication vehicle, a bearer of ideologies, a popular passion. In this way, sport affects the structure, trends and aspects of society, and can change its characteristics: in this sense, it can be considered as a social change "engine". Precisely for this reason, it has been demonstrated that the sports sector is set to generate positive consequences both at an educational level and at the level inclusive. Moreover, through the use of technological tools in the main social contexts, such as school and sport,

it is possible to break down exclusive barriers which have always represented a considerable limit to the spread of inclusive didactics. At sports level, the support of the technological tools allows for a marked improvement in performance. This increase in the athletic and sports results generated benefits both for the disabled and the non-disabled athletes, allowing to analyze that technology, if properly developed and used, is a non-discriminatory factor. In addition, the potential inclusive value of sport and the ability to increase the state of physical and mental wellbeing can be amplified through the adoption of the currently available technology. Therefore, we all hope that scientific research will focus on the sport-technology pair in order to promote the spread of effective and efficient tools in sports activities to improve athletic performances, health status and conditional abilities of athletes without any discrimination, in accordance with the principles of the inclusive didactics.

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