Disability and Sport: Insights and Challenges through the application of ICF standards from the Organizational Perspective

Disabilità e Sport: Intuizioni e Sfide attraverso l’applicazione degli standard ICF nella Prospettiva Organizzativa

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Abstract

This paper aims to investigate the link between disability and sport fields by adopting an organizational perspective through the application of “International Classification of Functioning, Disability and Health” (ICF) framework. Disability represents one relevant phenomenon worldwide but scholars and practitioners still pay scarce attention for proposing and implementing effective managerial and organizational solutions to overcome barriers or constraints for disabled people. The introduction of the ICF can significantly support the real widespread of the idea “free world for all”, also thanks to the crucial role of sport in promoting the social inclusion. This paper provides a deep reading of both phenomena, disability and sport, through the ICF standards application, to suggest and promote organizational and managerial solutions, especially in terms of training, in any organizational contexts.

Questo articolo si propone di indagare il legame tra due specifiche aree di studio, la disabilità e lo sport, adottando una prospettiva di analisi organizzativa, in cui si provvede ad applicare il quadro degli standard “International Classification of Functioning Disability and Health” (Classificazione Internazionale del Funzionamento della Disabilità e della Salute) (ICF).

La disabilità rappresenta un fenomeno rilevante in tutto il mondo, ma gli studiosi e gli operatori prestano ancora una scarsa attenzione al fine di proporre e implementare efficaci soluzioni manageriali e organizzative per superare le barriere o i vincoli esistenti per le persone disabili. L’introduzione del sistema ICF può supportare in modo significativo la reale diffusione dell’idea di un “mondo libero per tutti”, anche grazie al ruolo cruciale ampiamente riconosciuto allo sport nel promuovere l’inclusione sociale.

Questo articolo fornisce una lettura approfondita di entrambi i fenomeni, la disabilità e lo sport, attraverso l’applicazione degli standard ICF, per suggerire e promuovere soluzioni manageriali e organizzative, soprattutto in termini di formazione in qualsiasi contesto organizzativo.

Keywords

Sport; Disability; ICF; Training; Organizational Practices; Managerial Policies.

Sport; Disabilità; ICF; Formazione; Pratiche Organizzative; Politiche Manageriali.
Introduction

This paper aims to investigate the application of the “International Classification of Functioning Disability and Health” (ICF) by considering together disability and sport fields.

On the one hand, disability in its several forms (cognitive, physical, sensory disability) represents a phenomenon that is becoming very relevant in any countries in the world, but in the research and practice a clearer and more integrative reading of this issue is required for managing and overcoming barriers or constraints for disabled people (Moliterni et al., 2018; Visentin, 2016; Ferrara and Varriale, 2018; Söder, 2009; Norvich, 2007). On the other side, sport, generally physical activity, has been recognized as crucial for supporting and giving increasing opportunities for people with disabilities (PWD) to overcome and manage barriers and constraints. Indeed, sport is inclusive and has been widely recognized as a therapeutic factor and effective instrument for supporting PWD (Ferrara and Varriale, 2018; Pitts and Shapiro, 2017; Di Palma et al., 2017; McConkey et al., 2013; Dowling, 2012; Harada et al., 2011; Thomas and Smith, 2008; Bailey, 2005; Dowling et al., 2004; Sherrill and Williams, 1996).

In this direction, the ICF standards can significantly support the real widespread of the idea “free world for all”, making more effective the link between disability and sport. The ICF document, introduced and divulgated in 2001 by the World Health Organization (WHO), establishes the criteria for categorizing PWD and their difficulties in physical, sensory and cognitive functions, also related to the contextual factors. Thanks to this classification, individuals with disabilities in any organizations can be categorized for identifying their special needs and adequate accommodation facilities and solutions also considering the crucial role played by the sport field.

The ICF document significantly and increasingly affects the way in which data regarding disability, also linked to sport, are conceptualized, collected and processed in any human activities, by recording its application in several sectors, but something more is needed, that is effective training and educational programs for the overall society.

This exploratory study conducts a review of the literature on disability, sport and ICF. We evidence how the ICF framework is relevant but not still sufficient for achieving the fixed goals, indeed managerial and organizational solutions, such as training, for making the link between disability and sport stronger, are required and need to be identified and applied.

1. Disability and ICF: an integrated reading within organizational settings

In the last three decades, disability has been broadly investigated by scholars and practitioners by adopting very different viewpoints, such as medical, technical, technological or managerial perspective (Moliterni et al., 2018; Angeloni, 2011, 2010; Geisen and Harder, 2011; Rosenthal et al., 2007; Moser, 2006; Gregor et al., 2005; Stucki et al., 2002). Although there are numerous studies on this issue, effective and positive managerial and organizational solutions for managing and overcoming the challenges due to disability are still missing, especially in the perspective of creating positive conditions for improving the cultural, technical and social change within organizations and the overall community (Ferrara and Varriale, 2018; Valet, 2018). Nowadays, the current idea of disabled person goes beyond the individual’s stereotype of disability, where disabled person has been usually seen only in a wheelchair or anyway outside the social life, instead today disability refers to anyone who, permanently or temporarily, has physical difficulties limiting his/her movement (women pregnancy, heart disease, convalescent individuals or limb in a cast, people with stroller, obese, elderly, children, etc.) or sensory limited perceptions (blindness, visually impaired, deafness and mutism), as well as, individuals with cognitive or psychological difficulties.

The way to approach the disability deeply and significantly changed thanks to the intro-
duction of the International Classification of Functioning, Disability and Health (ICF), drawn up in 2001 by WHO, which has spread an innovative way to consider health and disability, by representing a classification of health and health-related domains (WHO, 2001). In 2001 the WHO officially replaces the outdated International Classification of Impairment, Disability and Handicap (ICIDH) (WHO, 1980) with the ICF (WHO, 2001), which was the result of the experience and feedback of stakeholders for overcoming the original and unsatisfactory ICIDH. The ICF framework allows to measure health and disability at both individual and population levels.

Indeed, the ICF model classifies and describes both health and disability for creating a single language which becomes a reference scheme, following the idea that the organizations and the entire society, not subjective factors, can cause the disability. In this direction, the concept of a person with disabilities has been overcome for emphasizing the idea of “non-skilled environment or unsuitable”. According to this model, each individual has to be evaluated taking into account both personal and environmental factors, from a health and non-disease perspective, and thus he/she can be conceived as a complex and interconnected system like the result of interactions between these factors (Ianes and Macchia, 2008). Hence, the concept of handicap has been replaced from the construct of “limit to social participation” and disability can assume different forms, it can be physical but also it can be related to other aspects, that is the influence of environmental factors, physical and social and inadequate or insufficient proposals of organizations, and the overall society, for people with special needs.

The ICF represents a revolution because it states that any individual, in his/her life, can become disabled because of poor health condition, or due to a context/a negative environment that makes limitations, restrictions or completely delete his/her functional capacity and social participation (Soresi et al., 2011; Soresi et al., 2007).

The ICF provides a list of environmental factors because individuals live in one specific context, consequently their functioning and disability can be different because they occur in a context. The ICF framework defines and measures disability, through detailed classifications and codes, for achieving the goal “to establish a common language for describing health related states in order to improve communication between different users, such as health care workers, researchers, policymakers, and the public, including people with disabilities” (WHO, 2001: 5).

All 191 WHO Member States in the 54th World Health Assembly on 22 May 2001 officially endorsed this document (resolution WHA 54.21) as the international standard to describe and measure health and disability.

Numerous updates and revisions concern the ICF model. Indeed, in 2006 the Functioning and Disability Reference Group (FDRG) was established, through different task groups from several cultures and background, for continuously improving and modifying the coding guidelines and for developing mechanisms to collect useful data for revising and updating the classification and the codes (Reed et al., 2005), evidencing also the need to identify and overcome its limits (Jelsma, 2009). In 2007 it was also introduced the International Classification of Functioning, Disability and Health for Children and Youth-ICF-CY (WHO, 2001; 2007), which represents a model able to be specifically applied in the educational setting for the evaluation practices, providing a multidimensional vision of the human functioning taking into account the interaction between the person and the environment (Moliterni et al., 2018), where the disability needs to be evaluated considering in the school environment which barriers and obstacles still exist and which social participation activities and solutions are required for promoting the learning process for all the students, especially students with special needs.

Two parts can be distinguished in the ICF core structure, that is the Functioning and Disability and the Contextual Factors. Also, other two components characterize each of these parts, that is: regarding the Functioning and Disability part, there are the Body component consisting of two classifications, Body Functions and Body Structures, and the Activities and Participation component that covers domains of functioning from both an individual and societal perspective; regarding the Contextual Factors part, the two components are the Environmental Factors and the Personal Factors.
The components of functioning can be expressed either as non problematic functioning or as a disability (i.e., impairment, activity limitation, or participation restriction). The chapters in these two classifications are parallel and organized according to body systems.

In the second part, the Environmental Factors consist of the physical, social, or attitudinal world, ranging from the immediate to more general environment and they are qualified as either facilitating or hindering functioning, compared to the Personal Factors, which may include gender, age, race, lifestyles, habits, education and profession, but they are not currently classified in the ICF, mainly because of the large societal and cultural variance (WHO, 2001).

In brief, two parts in the ICF can be identified, each with two components, which concern various domains composed of the categories that make up the actual units of classification, representing the health and health-related state of an individual, all of which can be qualified in both positive and negative terms.

In addition, the national and local governments, scholars and operators in different settings have being paid a growing attention to the ICF theme. In the period 2001–2007 more than 400 papers published considered the ICF in the PubMed showing the relevant interest of scholars on this WHO framework (Jelsma, 2009). Thus, the ICF framework has been widely described and discussed by scholars (Moliterni et al., 2018; Bruyere, Van Looy and Peterson, 2005; Stucki, 2005).

Authors evidence specific features of the ICF, such as health and disability interaction (Mahdi et al., 2017; Stucki et al., 2002), or in the clinical settings, the development of core sets crucial to specific health conditions (Wildner et al., 2005; Cieza et al., 2004) or the link between the measurement instruments to gain information and the ICF codes (Cieza et al., 2004; Cieza et al., 2002).

The ICF classification plays a crucial role for giving in advance the needed elements to make the organizational structures, so their processes and activities, comfortable, accessible and used in practice for all PWD (Darcy, Cameron and Pegg, 2010; Darcy, 2010; Lovelock, 2010; Darcy and Dickson, 2009; Ray and Ryder, 2003).

In summary, the ICF model identifies and describes PWD evidencing their different conditions for justifying their disability, e.g. some individuals should have biological complications or difficulties in personal activities; others can have problems with the environment, participation, and so forth. The ICF framework can be successfully applied in any organizational setting and field, as already outlined and occurred, also in the sport setting for identifying and categorizing the standards and special needs of PWD, considering the high social inclusive role of sport.

2. Disability and Sport: Managerial solutions for organizations through ICF standards

Sport is recognized as one of the most effective instrument for promoting and stimulating the social inclusion and integration of minorities and at risk of social exclusion groups, such as disabled people. Sport plays a crucial role at emotional and social level, as well as, it is multidimensional, dynamic, playful, suitable for intensifying the awareness of oneself and one’s body, it represents an educational and training tool and often a precursor of social change (Varriale and Tafuri, 2016, 2015). Sport combines physical activity with the recreational, promoting health, longevity, physical and psychological wellbeing.

In the prevalent literature, sport has been defined adopting different perspectives and various ways of interpreting. Some definitions of sports primarily stress physical and competitive elements inside sport issue, or focus on its cultural determinants (Portenga et al., 2017; McBride, 1975; ). Other definitions, instead, take into account the institutionalization of sporting forms and the increasing significance of rewards, largely financial features, by overcoming the personal satisfaction, identifying different and wider factors that contribute to define the contemporary sporting landscape. Furthermore, more definitions aim to enrich the sport concept, providing a
more comprehensive interpretation by including non-competitive elements, like recreation and health (Varriale and Tafuri, 2016, 2015; Brooks, 1994; Mullin, 1993; Goldstain, 1989; Zeigler, 1984; Chu, 1982).

The slogan “Sport for All” represents a very popular and well known message worldwide which evidences the engagement of individuals in any physical activity, both in passive forms, such as walking, or in more highly active, like playing competitive football, overcoming any kind of architectural or social barriers (Palm, 1991). The term “sport” etymologically derives from the term “disport”, which means to pay and take the attention away from someone or something, that is the word “sport” concerns the habits of people of taking care of themselves keeping away from them the stress and pressures of the daily life (Edwards, 1973). Although the sport activity is deeply related to escape and guarantee entertainment and relax, sport recently implies a broader concept, involving both participants and spectators who are able to satisfy their needs (Hudson, 2003).

Since 2005, the “International Year of Sport and Physical Education” as declared by the United Nations (UN), sport has been significantly and diffusely used as a tool for facilitating social change; in fact, sport is usually considered for promoting the social development, that is discouraging criminal behaviours or fostering the integration and rehabilitation of PWD (Lev-ermore and Beacom, 2009).

In addition, during the past three decades, a distinctive and large body of literature focuses on the sport topic, taking into account the characteristics of the physical and cultural phenomenon, and the academic and practical studies on sport evidence its relevant links to the society. These significant studies cross traditional disciplinary boundaries, including socio-political analyses (Hargreaves, 1986; Hargreaves, 1994; Hargreaves; 2002; Bairner, 2001; Maguire, 2000, 1999, 1994) or historical works (Guttmann, 1978, 1994; Mandell, 1984; Brailsford, 1992). Most disciplines in the literature, such as social history and sociology, conceive sport as social and cultural constructions in the globalized era, considering the features of the societies (Heinemann, 1993; Dunning, 1999; Dunning and Waddington, 2003) or taking into account more homogenized traits due to the process of globalization (Maguire, 2000).

Accordingly, in the last thirty years, sport significantly and broadly enriches its meaning, keeping the ‘fun’ element as crucial characteristic, including new and more complex factors, taking into account the evolution of sport specializing professional sporting forms in ‘developed’ societies. In this direction, the practice of sport is progressively common for PWD, also using innovative materials and technological aids, in managing and overcoming any disadvantages and difficulties.

In this new vision, the participation in sport for PWD must be strongly protected, because sport can support the rehabilitation and considers the relevant social values in any ways, such as preparation of staff, the creation of sports centers, and the promotion of specific associations. Sport, generally physical and recreational activities, plays a crucial role promoting the aggregation for PWD improving their quality of life and effectively contributes to their rehabilitation and integration into the social connective tissue (Ferrara and Varriale, 2018; Varriale and Tafuri, 2016, 2015). Likewise, today many athletes with physical disabilities, especially thanks to the technological innovation, are able to successfully engage in almost all sporting events, with performances ever closer to those of the able-bodied.

In this scenario briefly described, where we evidence a significant link between disability and sport, the former broadly supported by the latter, the ICF framework can give further support for making the relation between disability and sport stronger. Indeed, according to previous studies on the topic (disability, sport and ICF) (Visentin, 2016; Thomas and Smith, 2008; Tweedy, 2002), the ICF model is able to provide a broad classification of all the forms of disability for all the individuals, making possible to find out the special needs of them identifying the possible solutions and structures in any organizational settings, at competitive and non-competitive level, for practicing sport by promoting the social inclusion.

In fact, for many years, all the sport organizations tend to build structures and environments
which reserve fundamental specific elements for PWD. More specifically, in each sport organization dedicated accessible and used in practice areas are developed for responding to the specific needs of PWD, such as people with motor disability, that is quadriplegic or paraplegic people on wheelchair, or people with sensory disability, like blind or visually impaired people (Varriale and Tafuri, 2016).

The application of ICF within sport organizations can significantly facilitate the management of PWD creating the best conditions for providing comfortable and used in practice structures, and help PWD to practice sport without barriers or obstacles improving their social inclusion. For instance, on the basis of the ICF document, blind people and visually impaired present limitations in their social and communicative activities but when these needs are clarified and identified thanks to the ICF framework, these individuals can practice sport without problems.

The prevalent literature has identified the main constraints faced by PWD, e.g., the documentation and availability of accessible accommodation information and also the conformity and accessibility of the sport organizational structures (Darcy et al., 2014; Calder and Mulligan, 2014; Hussein and Yaacob, 2012; Gray et al., 2012; Cardinal and Spaziani, 2003).

The main complaint cases concern individuals with a mobility disability primarily evidencing three features, the lack of accessible infrastructure and inclusive customer service provisions, and the inadequate information provision, e.g., the presence of steps, inaccessible toilet facilities, and so forth (Small and Darcy, 2011). At the same time, one very complex feature concerns the lack of useful information and training for employees and employers, including coaches, physical trainers, etc., in the sport organizations, in managing PWD making them to easily and successfully practice competitive and non-competitive sport.

Thus, the literature provides interesting contributions, also with significant reports about the constraints and barriers faced by PWD, also in the sport setting, but yet, no research has still focused on managerial and organizational solutions, like training, able to support and promote sport for PWD.

3. Managerial and organizational solutions for PWD involved in sport through ICF standards: Training and educational programs

The ICF document might mostly represent a guideline for the organizations to address them to respect the rights in daily living, working, travelling and enjoying leisure activities for PWD.

According to the regulations and the ICF document, by considering Disability Management approach (Bruyère and Shrey, 1991; Quinn, 1995; Shrey and Hursh, 1999; Williams and Westmorland, 2002; Tompa et al., 2008), some measures and practices have been addressed to prevent and minimize work-related disability and also make accessible and used in practice any organizational environments overcoming all kinds of barriers (cultural, social and architectural barriers), but effective managerial and organizational solutions are still missing especially in training and educating the organizations and the overall community.

Focusing the attention on the link between disability and sport, the application of the ICF document is not enough for ensuring a stronger social inclusive role of sport for PWD, but a cultural and life change in the mind of people, in general, and of all the individuals involved is needed (Valet, 2018), consequently, through specific educational tools and, especially, training, these deep changes within organizations and the overall society can be introduced and accepted by respecting the rights and the special needs of PWD through the force of sport activity.

Otherwise, in the last years the disability managers are assuming an increasing relevance within organizations in several settings, including the sport industry.

Thus, the disability managers, applying and respecting the regulation and ICF framework, must introduce effective instruments for promoting and evaluating the comfortable and accessible location for practicing sport with acoustic and light detectors in enjoying all the sport
activities, and also tactile, acoustic and light facilities, especially in the bathroom, are required. Furthermore, the development and implementation of training and educational programs for disability managers and for all the people who interact with PWD are required.

It is necessary to constantly evaluate and monitor how and if people and organizations respect the conditions for the comfortable and accessible organizational environment for PWD making them able to really enjoy and be committed through the sport activity. Effective training and educational programs are needed for both guaranteeing the accessibility and use in practice of building and any structures by PWD (i.e. mobile gangways, elevator and location in enjoying all the organizational activities, etc.), and developing and deeply changing the mind of people in accepting and supporting PWD through sport. Indeed, the application of ICF framework needs to be supported and spread within the culture and the entire society for promoting the social inclusion of PWD through the sport.

This conceptual study points out the relevance of creating and stimulating a more innovative and opened culture, in which individuals can think and feel that the social inclusion of PWD, through sport implementing the ICF framework, is something related to their actions and behaviours, looking deeper into the problem and seeing innovative managerial ways and starting to hypothesize about effective ways of solving it. The overall society, especially within the sport organizations and the entire sport industry, needs to be encouraged, supported, and guided through training to develop an awareness and involvement to foster this cultural change for social inclusion of PWD, overcoming the limits of the same ICF framework. The more the individuals are educated and trained regarding disability, sport and ICF, the more that effective managerial and organizational practices will be accepted and successfully implemented for promoting social inclusion.

In the research on disability, sport and ICF, two main correlated steps are necessary: (1) to deeply study the ICF framework in the direction of “disability management” in any organizational setting and conditions; and (2) to activate training programs for the overall society, especially individuals within and outside sport organizations, for identifying and knowing the way to support and promote social inclusion of PWD through the sport.

Researchers need to focus and understand the dynamics within any organizations, especially in the sport industry, that is, the impact of the ICF framework on the people, workforce, its values, and its behaviours. Unfortunately, most people still tend not to pay attention to the effects of their behaviours compared to PWD. They tend not to see or feel the link between their actions and the general social conditions of PWD. Likewise, the numerous barriers still existing in adopting and implementing the ICF framework can be significantly overcome thanks to training. These barriers consist of not only technical and operating and physical obstacles, but also mostly include organizational culture and change management barriers.

Training programs, focused on educating and increasing knowledge for the individuals, can help to overcome these barriers because, in this way, thanks to this new knowledge, the overall community, especially people involved in the sport organizations, can really understand how their behaviours and the environment can affect the daily life of PWD.

In this perspective, educational promotion and vocational training, using different initiatives such as brainstorming techniques during work meetings, specific tutoring or mentoring programs, cooperative learning and learning by doing (analysis and implementation of ICF standards), play a crucial role for promoting the social inclusion of PWD in improving their life conditions.

Most limitations observed, in interpreting and implementing the ICF framework for supporting the social inclusion of PWD through sport, concern the liability of individuals and the overall sport community in stimulating deep changes in the organizational culture and climate. Thus, in turn, it is necessary to promote more awareness of socially and sport sustainable behaviours, and training and educating the individuals to face and manage this challenging issue.
Final considerations

This paper is focused on disability and sport read together through the ICF framework. We have briefly observed and described the applications and implications of ICF document, where disability that has been receiving an increasing interest by both scholars and practitioners, but the attention is still scarce, especially considering sport with the crucial role of promoting the social inclusion of PWD, also taking into account the application of ICF standards. Although in the recent years there are many innovative contributions on the topic, where the ICF document finds application, something more is needed to be done that is the introduction of effective training and educational programs able to address the disability issue within organizations, and also to make the link between disability and sport stronger for the total social inclusion of PWD. Training in and outside the overall community and the sport industry can really make deep changes for managing and overcoming the still existing physical, cultural and social barriers.

The ICF document does not give any suggestions about which managerial solutions they can adopt to assess and monitor all the required conditions to effectively guarantee and provide comfortable, accessible and used in practice facilities to PWD and how sport can really promote their social inclusion in the daily life. Starting from this gap, according to previous contributions in the research and practice, our conceptual study matches disability and sport through the application of the ICF classification, evidencing its limits and proposing the development and implementation of adequate managerial and organizational solutions, that is effective training and educational programs for making deep changes in the climate and culture of the overall community, also reconsider individuals’ behaviours and actions compared to PWD in practice sport, and deeply know the same ICF standards.

First, it is useful to activate training and educational programs for promoting a cultural and social changing process within the society for better managing disability, and also specific training is required for making people able to manage any forms of disability and apply the ICF standards. Still scarce is the information and knowledge about disability, and mostly PWD have been conceived as sick people without any social interactions with the world. Second, training and educational programs can better interpret and apply sport in the perspective of social inclusion of PWD.

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