Do children with disabilities play?

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In the previous chapter, we have defined what is play for the sake of play and described its importance for every child's harmonious development and well-being. Does it also apply for children with disabilities? And are children with disabilities interested in play and capable of playing? Before answering these questions, let us start by defining the concept of disability.
What is disability?

In 2001, the World Health Organisation (WHO) adopted the bio-psycho-social model to describe human functioning and the conditions of health and disability, by launching the International Classification of Functioning, Disability and Health (ICF). ICF represents the result of a scientific and socio-political debate about the definition of disability and the health model that underlies it. Prior to this, two models have existed: first the bio-medical, which attributed to the body impairment the main responsibility for disability and social disadvantage; then the social model, which has strongly emphasised the role played by physical barriers and social attitudes in producing the restrictions to participation faced by persons with disabilities. In the first case, solutions should be found and planned within the health system, in rehabilitation and intervention – ultimately within a perspective of separation and specialisation; in the second case, the solutions must be identified at the level of social and political programming, as well as in the change of collective attitudes – everyone's participation in community life and its opportunities must be guaranteed.

The bio-psycho-social model accepted to some extent the fundamental statements of the two previous ones and seeks, on the one hand, to balance the various elements that can favour or determine a condition of disability and, on the other, to highlight the numerous and constant interactions between them. The following figure represents the main concept of ICF.

Interactions between the components of the WHO ICF model
Within the ICF framework, functioning or disability are closely connected to biological factors, environmental factors and personal factors, each of them bringing a positive or negative contribution to the two main components of the individuals’ life, which are the activity and the participation. Disability is defined as ‘an umbrella term for impairment, activity limitation and participation restriction. It denotes the negative aspects of the interactions between an individual (with a health condition) and the individual's contextual factors (environmental and personal factors)’. More precisely, ICF asserts that ‘disability is characterised as the outcome or the result of a complex relationship between an individual's health condition and personal factors, and of the external factors that represent the circumstances in which the individual lives. Because of this relationship, different environments may have a very different impact on the same individual with a given health condition. An environment with barriers, or without facilitators, will restrict the individual performance; other environments that are more facilitating, may increase the performance. Society may hinder an individual’s performance because either it creates barriers (e.g. inaccessible buildings) or it does not provide facilitators (e.g. unavailability of assistive devices)’.

The purpose of the ICF is not to classify individuals, rather to put into evidence the complex relations between possible impairments of body functions or structures and the individual's activity limitations or participation restrictions, on the one hand, and the influence of the environmental factors as barriers or facilitators, on the other hand. Accordingly, ICF focuses on the description of functional characteristics, thus abandoning the stigmatizing approach to disability based on diseases, disorders or other health conditions.

The ICF establishes the Activity and the Participation as main components of the individuals’ health, which can reveal and give information on functioning or disability. In order to take part in activities and to participate in life, people need both to have the required capacity and to be able to perform within a given environment. While within the model capacity is defined as the highest level of a person's functioning in a ‘standardised environment’, performance is defined as what the person is in fact able to do in his/her usual environments of life. It is exactly thanks to this distinction that ICF paves the way to understanding the determinant role of environmental factors in influencing the functioning of an individual. These factors may intervene in favour of the individual’s performance, thus being considered facilitators, when thanks to them the individual's performance improves with respect to what is expected from the capacity analysis. On the contrary, they are considered as barriers, when their presence hinders or prevents the individual
from exploiting his/her full capacity and/or performance.

The WHO framework has the strength and the value of a philosophical Manifesto on human beings and their societies: men and women are considered active since their birth and throughout their life, because one of their innate instincts is the action on the world around them, and are intended as fully participating into this world – with nature, with other humans, with artefacts. Activity is essential for the individual’s development and life, and it may happen only within the environments in which he/she lives, and thanks to social participation: on this point ICF converges with the ecological views of development as a fruitful and mutual encounter between the person and the environment. Which different approach could better admit and explain the children’s play?

**Play and children with disabilities**

Children’s most important activity is play. Through play, as already mentioned, they learn, they experiment, they grow, they become social companions and they explore and interact with their life contexts.

Play has been expressly included in the ‘International Classification of Functioning, Disability and Health: Children & Youth Version’ (ICF-CY), the version of ICF devoted to children and their specificities, published in 2006. In this way, WHO recognises that play is a substantial component of the child’s health, playing a central role in the child’s life not only as an activity, but also as a crucial occasion to meet the others, to interact with them and to take part in his/her contexts of life. As a consequence, any action aiming at safeguarding and implementing a good children’s health status should address play and do it from the biological, the psychological, and the social and environmental perspectives.

Play, in fact, represents a peculiar opportunity for building social inclusion. The contexts in which children’s play occurs are an ideal and fertile soil for social development, to nurture and support the adoption of attitudes of collaboration and mutual respectful interest, to educate to inter-individual differences and foster integration, allowing everyone to participate in the best way and to have the opportunity to choose. Within inclusive play contexts, all children may have the opportunity to share spaces, objects, intentions and rules, they can test their abilities, imitate the others or being models for them, or they can even refuse to play.
and communicate their ‘getting out of the play’. They should have the opportunity to win, to lose, to collaborate, to build together, to negotiate and to argue, to be wrong, to explore, to feel happy, scared, excited, concentrated.

This is true for all children, regardless of possible impairments: all children can in fact play, if environmental and personal factors are able to accommodate children with disabilities’ particular needs. And play is also a very special and irreplaceable life context to foster true inclusion for children with disabilities, since it provides opportunities to interacting with others, on the basis of fun and reciprocal acceptance.

Children who experience some types of impairment need and want to play. However, they may meet numerous obstacles, such as difficulties in initiating and carrying out play, making it more complex, understanding or applying some rules, sharing it with other peers; they may sometimes be scared by some aspects of the play contexts or tools, or be deprived of leisure time by their daily schedule, often full of rehabilitative activities. In some cases, an impaired child may seem stuck in a developmental phase without proceeding to explore new types of play, preferring to repeat those who is already accustomed to. In other cases, an impaired child expresses the interest in particular ludic activities that supposedly are not suited to him/her (e.g. playing ball for a blind child, running for a child with cerebral palsy). Some children may conceive only the real world and pretend or role play seems abstruse and even frightening to them; others would like to take part in group games but they feel (or are) excluded from peers and remain on the outskirts.

The most frequent occasions to play for children with disabilities are proposed to them by adults within dyadic relationships. However, for rehabilitation professionals, medical doctors and special educators – whom they meet almost every day – play is often a disguise for exercise and functional improvement. This habit is then transferred to home, because parents tend to reproduce, in the same playful way, those training activities which are well tested and do not challenge them. In addition, leisure time, where new play occasions and desires might arise, and play for the sake of play might occur, is reduced for these families due to many commitments. Please refer to Chapter 3 for a discussion on the barriers to play faced by children with disabilities.

The different types of play identified in Chapter 1 are experimented by children along their development, in relation to their preferences and dispositions, certainly influenced by the characteristics of their functioning. Nevertheless, the children’s
context has a determinant role: the presence of siblings, the lifestyle (e.g. open to the outdoor and natural environments or not, full of relationships or not), the adults’ ideas on the importance of play, the ludic experience of parents, the quality of inclusive policies in their countries, etc. This chapter will briefly discuss the impact of health conditions, body functions and structures on play. Environmental and personal factors will then be discussed in the following chapters providing specific guidelines to support children with disabilities’ play.

**Types of disabilities and play**

As discussed above, disability is a wrong or critical encounter between the physical, the psychological and the contextual characteristics. This paragraph is mainly devoted to consider more in-depth the impact of the different kinds of impairments on play.

The LUDI Classification of Disabilities, which is the result of an on-purpose study, is reported in the following Table.

<table>
<thead>
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<th>LUDI categories of disabilities</th>
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<tr>
<td>Mental or intellectual disability (mild, moderate, severe, profound)</td>
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<tr>
<td>Hearing impairment (partial hearing impairment, deafness)</td>
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<tr>
<td>Visual impairment (partial visual impairment, blindness)</td>
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<tr>
<td>Communication disorder (language disorder)</td>
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<tr>
<td>Physical impairment (mild, moderate, severe)</td>
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<tr>
<td>Autism Spectrum Disorders</td>
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<td>Multiple disabilities</td>
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For each of these categories of disability it is possible to describe the most frequent physical impairments and the related functional limitations. However, it is important to point out that, if this allows to pay particular attention to certain developmental areas that may be compromised, it is not intended in any way to standardise the children who have the same type of impairment, thus disregarding inter-individual differences.

On the contrary, it should be clear that every child is different from the other ones, due to personal factors (such as the family, its educational style, the geographical area in which they live, with its characteristics and traditions, the gender, personality traits, preferences, etc.) as well as to the individual biogenetic heritage.

**Mental and intellectual disabilities**

Children with mental and intellectual disabilities may show an overall delayed development and a very particular functioning of mental skills; every acquisition needs a long period of consolidation, through frequent repetitions and recalls. They also meet difficulties in understanding what happens around them, in relating events to their possible causes and also in decoding and acquiring the verbal language. They may need support in learning from experience, often due to memory problems and to a kind of reluctance towards environmental exploration. Social relationships may be challenging too, in some cases they prefer solitary and isolate activities, in other they may behave in a too intrusive way. All these functional aspects may delay and affect both practice and pretend or symbolic play.

Mental or intellectual disabilities imply – to various degrees – deficits in reasoning, problem solving, abstract thinking, judgement, as well as deficits in adaptive functioning, including social and practical difficulties; they may also influence a refined and effective movement coordination. These functional aspects may affect constructive play and rule-based play.

As youngsters, they hardly succeed in developing an adequate self-consciousness; the frequent lack of awareness about their difficulties may be a critical aspect that educators should carefully consider when establishing inclusive play contexts and activities.
Hearing impairments

A hearing loss may prevent a child from totally or partially perceiving sounds. This has, of course, important consequences on the child’s development, mainly related to his/her participation to the environmental events, if the information is prevailingly conveyed by sounds, especially in the case of verbal language.

While practice and constructive play are not influenced that much by this kind of impairment (except when the activity or the toy are mainly based on sounds), symbolic play may be hugely affected, since it makes a large use of communication and verbal exchanges and it is mainly held in group. The case of games is even more complicated: in fact, the rules might represent a bias, if they are not clearly explained and understood.

The knowledge and use of Sign Language from the very early childhood may help a lot, especially if this competence is shared among a group of peers, regardless of whether they are hearing children or not.

Roberto, 8 years old, Malta
Visual impairments

A functional limitation of the vision system that cannot be compensated by usual aids may provoke a large range of visual loss, from low vision to blindness. Children with visual impairment may experience many difficulties in relating to the environments and the objects around them; they must rely mainly on hearing and touch to explore the space and to act within it, but this implies longer times (with respect to their peers) in understanding what things are made of, how they work, what happens and what they can expect from the situations and the persons around. For these reasons, they may find it difficult to develop any type of play.

Practice and constructive play may be delayed or deprived because they require children with visual impairments to relate with the built world. Quite paradoxically, pretend play may be tricky because their way to interpret the world is necessarily strictly based on fixed rules – and thus it is difficult for them to interpret one object ‘as if it was’ another one, similar but not the same.

On the other hand, they may prove very skilled in symbolic play activities based on verbal language (e.g. fantasy tales, theatre representations, etc.) as well as in rule-based games, if the tools used are accessible to them. Generally speaking, in fact, their cognitive and language abilities are preserved and sometimes they become their prevailing and brilliant interaction channel with the others.

Acquiring a satisfying and rich social competence often proves difficult for visually impaired children, especially with sighted peers; this contributes to provoke their predominant disposition towards solitary play or in small groups. However, collaborative play and in bigger inclusive groups may be pursued and obtained: some experiences of adapted and inclusive sport activities are a very effective demonstration of possible future exploitations.
Communication disorders

Deficits in language and speech are considered as a specific area of impairments, because they may be experienced without connections to other disabilities.

These disorders may affect social participation and occupational performance; preschool children linger long in the stage of practice play with respect to their peers, while symbolic play is mastered by them more slowly and in a less creative way. Symbolic play may be hindered by the difficulty to agree with the others about pretending an object is something else, or in building up play situations with roles, conversations, etc. They tend to play with toys in a solitary and silent way; furthermore, their language may be considered ineffective or not clear enough by their peers, thus diminishing their active participation to social play activities.

When they become older, their communication impairments may create difficulties in handling peer conflict and in behaving in an assertive way: all the play activities in which negotiation, mediation, explaining one’s own points of view are necessary can be challenging for children with communication disorders. This has important consequences, on the one hand, on their development of skills needed for rule-based games and, on the other hand, on their participation to social play in general.

Physical impairments

Physical impairments, that may be acquired or congenital, affect at various degrees the physical ability to move, to coordinate actions, to perform physical and motor daily life tasks independently. The great variety of causes of physical impairments may create very different types of limitations to functioning; in some cases, the physical impairment is associated with other types of disabilities – sensory, intellectual, neuropsychological – and this, of course, creates different life situations.

Generally speaking, children with physical impairments experience difficulty in concretely interacting with the environment around them, using objects and toys. Exploring and moving in the space may prove very difficult for them and even impossible without any support. Naturally, this prevents or makes it very challenging the practice and the constructive types of play. According to some studies - but this is a vital issue of discussion now in research – this deprivation of a concrete
experimentation with the built reality may in turn have other detrimental effects in reasoning, representation and abstraction skills development.

The participation of children with physical impairment to symbolic play might be greatly compromised by their motor impairments, but—moreover when the cognitive abilities are safeguarded—it can also be strongly supported by imagination and fantasy, and concretely accomplished thanks to the use of virtual environments and technical aids. They may also play rule-based games with their peers on a digital support if available. A possible issue in this case may be the response speed required by the game, because children’s movements might be slower than expected or required, and regulation measures should be identified accordingly.

Very often, children with physical impairments need the adoption of various assistive devices and support and this implies a special organisation of their daily life and of the spaces where they live; this may create risks of participation restrictions. In order to avoid it, inclusive play plans should then take into careful consideration the practical, technical and logistical aspects of the activities.
Children with Autism Spectrum Disorders (ASD) show restrictive, repetitive patterns of behaviour and experience also deficits in social communication and social interaction. This group of disorders is described as a ‘spectrum’, to underline that various areas and degrees of limitations may be involved and that, as a consequence, the range of possible manifestations is really wide and differs from one individual to another.

Nevertheless, the play skills of children with ASD may be severely influenced by the central role of their impairments in the social and the communication areas; in addition, it should be reminded that an intellectual disability is often associated with these disorders, together with sensory dysfunctions (that may take the form of over-sensitivity as well as insensitivity to stimuli), delayed or reduced verbal communication, difficulties in emotional development.

Children with ASD are usually described as less interested in play activities than their typically developing peers. Their difficulties in the gross and fine psychomotor and coordination areas may be related to their little interest into the objects and how they work, which decreases the rate and the quality of the practice type of play, even if this observation seems contradicted as soon as they concentrate on a detail of an object or a particular use of it. However, in this case the repetitive behaviours they adopt are not perceived as playful, rather as a means towards social isolation. Constructive play may be equally challenging, since it is usually based on the application of fine motor skills to create a consistent final product. In fact, while they have the great ability to concentrate on details, they find it difficult to foresee an overall form, built by assembling small pieces. Pretend and symbolic play – as studies in the field widely confirm – are affected by their social difficulties, for example in sharing with another the attention on the same activity or object, or in understanding the perspective from which a peer looks at (or evaluates, or perceives) the same event.

Pretend and symbolic play require the ability to deal with fantasy and imagination, to look to possible worlds and the possible life within them, and these abilities are not easy to achieve by children with ASD.

The difficulty to adopt the other’s perspective is also what mainly impedes children with autism spectrum disorders to show an autonomous interest into rule-based play, and to take part in it. It may also justify why collaborative and social play with
peers is less frequent with them. Nevertheless, it is not rare to observe that, once a child with ASD finds a play companion interested in the same specialised activities he/she wishes and is able to do, the child shows great pleasure in sharing them.

**Multiple disabilities**

Today there is not a consensus on a unique definition of multiple disability. What is anyway clear is that this expression is related to multiple severe impairments experienced by the same individual, which creates severe conditions that need to be accommodated by very specialised programs. Children with multiple disabilities have huge problems in receiving and decoding information coming from the environment, and they often live in a condition of misinformation that hugely interferes with their play skills. They may show unexpected responses to the proposed ludic activities, may require a lot of time in processing the stimuli, or exhibit intense reactions. Social skills are usually severely compromised, and they often tend to isolation and to use the objects for self-stimulation or stereotypical behaviours. Involvement in pretend and symbolic play, and even more in rule-based play, is usually hard to achieve. Cooperative and social play is also challenging.

In this case, researchers have mainly concentrated their studies on play as one of the prevailing means to support the development of possible new skills by children with multiple disabilities: improving perception, movement, communication and socialisation have been the goals established in these works. The right space setting and equipment availability are of utmost importance for supporting their play.
Conclusion

Do children with disabilities play? Yes, they do and they can. And they could play more, and better, if the most suitable and accurate solutions to overcome limitations and restrictions to play are found, created or invented.

To reach this objective, to make play possible, playful, fully satisfactory, autonomous and inclusive at the same time, the three components of the ICF – body functions and structures, activity and participation, and environment – should be considered altogether.

Turning the spotlight on infant play thus, means considering various aspects of the child’s life and environment, including his/her body, without putting them in a hierarchy but rather studying their interdependencies: a complex task that requires competence, specialised observation ability, intuitive capability and the availability of a lot of information.

In this chapter, a first step towards the design of this interdependency has been undertaken, since the main functional characteristics of the different categories of disabilities singled out by LUDI have been presented, in relation to the types of play identified. Even if they should be considered in the light of the high variability existing between individuals, this presentation aims to contribute to build up an overall and multidisciplinary knowledge on play and children with disabilities.

In the next chapters, the environmental factors will be treated in-depth so that, at the end, it will become clear that, under proper conditions, children with disabilities can enjoy the ludic experience in all its richness, engaging in fun, satisfying and challenging play activities.