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4 Conceptual Review of Disabilities

4.1 LUDI Definition of Disability

LUDI chose to adopt the definition of disability proposed by the International Classification of Functioning, Disability and Health (WHO, 2001) as it fits the purposes of the project.

Two definitions of disability that the ICF offers are outlined: both emphasise the complex interconnection between the individual and the environment. The first one puts greater emphasis on the environment and on how it can constitute a barrier or a facilitator for the individual's functioning. The second one explains the ways in which disablement can manifest in relation to restrictions in participation. They are presented as follows.

a) **"**Disability is characterized as the outcome or the result of a complex relationship between an individual's health condition[1] and personal factors,[2] and of the external factors[3] 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,[4] or without facilitators,[5] will restrict the

1 "Health condition is an umbrella term for disease (acute or chronic), disorder, injury or trauma. A health condition may also include other circumstances such as pregnancy, ageing, stress, congenital anomaly or genetic predisposition" (WHO, 2001:228).

2 "Personal factors are contextual factors that relate to the individual, such as age, gender, social, status, life experience and so on, which are not currently classified in ICF but which users may incorporate in their application of the classification" (WHO, 2001:229).

3 "Environmental factors constitute a component of ICF, and refer to all aspects of the external or extrinsic world that form the context of an individual's life and, as such, have an impact on that person's functioning. Environmental factors include the physical world and its features, the human-made physical world, other people in different relationships and roles, attitudes and values, social systems and services, and policies, rules and laws" (WHO, 2001:229).

4 "Barriers are factors in a person's environment that, through their absence or presence, limit functioning and create disability. These include aspects such as physical environment that is inaccessible, lack of relevant assistive technology, and negative attitudes of people towards disability, as well as services, systems and policies that are either nonexistent or that hinder the involvement of all people with a health condition in all areas of life" (WHO, 2001:230).

5 "Facilitators are factors in a person's environment that, through their absence or presence, improve functioning and reduce disability. These include aspects such as a physical environment that is accessible, the availability of relevant assistive technology, and positive attitudes of people towards disability, as well as services, systems and policies that aim to increase the involvement of all people with a health condition in all areas of life. Absence of a factor can also be facilitating, for example the absence of stigma or negative attitudes" (WHO, 2001:229).

individual's performance;[6] other environments that are more facilitating may increase that 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)" (WHO, 2001:15).

b) "Disability is an umbrella term for impairments,[7] activity,[8] limitations,[9] and participation[10] restrictions.[11] It denotes the negative aspects of the interaction between an individual (with a health condition) and the individual's contextual factors[12] (environmental and personal factors)" (WHO, 2001:228).

Moreover, these definitions are also evoked within the Convention on the Rights of Persons with Disabilities (UN, 2006), which puts emphasis on the possibility of participation for each individual: "[Recognizing that] disability is an evolving concept [...] [that] results from the interaction between persons with impairments and attitudinal and environmental barriers that hinders their full and effective participation in society on an equal basis with others" (Convention on the Rights of Persons with Disabilities, Preamble, Art. e).

According to the biopsychosocial model adopted by the ICF, these definitions highlight that disability is not a fixed concept. The condition of disability strictly depends on the impairment on one hand and on contextual factors on the other: the environmental characteristics (among them: social attitudes, architectural

6 "Performance is a construct that describes, as a qualifier, what individuals do in their current environment, and so brings in the aspect of a person's involvement in life situations. The current environment is also described using the Environmental Factors component" (WHO, 2001:230).

7 "Impairment is a loss or abnormality in body structure or physiological function (including mental functions). Abnormally here is used strictly to refer to a significant variation from established statistical norms (i.e. as a deviation from a population mean within measured standard norms) and should be used only in this sense" (WHO, 2001:229)

8 "Activity is the execution of a task or action by an individual. It represents the individual perspective of functioning" (WHO, 2001:229).

9 "Activity limitations are difficulties an individual may have in executing activities. An activity limitation may range from a slight to a severe deviation in terms of quality or quantity in executing the activity in a manner or to the extent that is expected of people without the health condition" (WHO, 2001:229).

10 "Participation is a person's involvement in a life situation. It represents the societal perspective of functioning" (WHO, 2001:229).

11 "Participation restrictions are problems an individual may experience in involvement in life situations. The presence of a participation restriction is determined by comparing an individual's participation to that which is expected of an individual without disability in that culture or society" (WHO, 2001:229).

12 "Contextual factors are the factors that together constitute the complete context of an individual's life, and, in particular, the background against which health states are classified in ICF. There are two components of contextual factors: Environmental Factors and Personal Factors" (WHO, 2001:229).

characteristics, social and legal structures) and the personal characteristics (among them: gender, age, coping styles, social background, education, profession, past and current experience, temperament). When this encounter between the person's functioning and the environment is not balanced, it can lead to limitation of activities and restriction in participation. This can be the case of participation in play activities of children with disabilities.

4.2 LUDI Categories of Childhood Disabilities

A classification of different types of disabilities is needed within LUDI because play, play materials, and play contexts can have a strict relationship with the individual's impairments and his or her activity possibilities.

OECD's (Organization for Economic Cooperation and Development) Centre for Educational Research and Innovation (CERI) published an interesting document 'Students with Disabilities, Learning Difficulties and Disadvantages: Policies, Statistics and Indicators' (2007, an updated version of a previous document published in 2005), which contains a collection of data from many countries. The document presents a comparison of data concerning the access to educational provisions by students with special needs in a number of OECD countries. In order for policy-relevant comparisons to emerge, a resource-based approach would require that the pupils included under this definition would need to be subdivided into some forms of straightforward classification scheme. Participating countries to the research agreed on a tri-partite system, in which students are divided into three cross-national categories: A, B, and C.

- Disabilities (category A): Pupils with disabilities or impairments that are viewed in medical terms as organic disorders attributable to organic pathologies (e.g., in relation to sensory, motor, or neurological defects)
- Difficulties (category B): Pupils with behavioural or emotional disorders, or specific difficulties in learning
- Disadvantages (category C): Pupils with disadvantages arising primarily from socio-economic, cultural, and/or linguistic factors

As LUDI focusses on the play of children with disabilities, the target audience of the project is related to category A. Table 4.1 shows the classifications used in the OECD member countries only with respect to category A.

Table 4.1. Classifications of category A used in OECD member countries

Country	Physical	Hearing	Visual	Mental	Communication	Multiple	Autism	Health	Behaviour or Emotion	Others
Austria	Physically disabled	Hearing impaired or deaf	Visually impaired or blind	Severe mental disability	- Speech impairment - Moderate speech problems			Ill students in hospital		
Belgium (Flemish community)	Pupils with a physical handicap	Auditory handicap	Visual handicap	- Minor - Moderate or serious mental handicap				Children suffering from protracted illness		
Belgium (French community)	Physical deficiencies	Hearing impairment	Visual deficiencies	- Mild - Moderate or profound mental retardation				Students suffering from an illness		
Canada (Alberta)	- Severe - Mild or moderate physical or medical disability	- Deafness - Mild or moderate hearing disability	- Blindness - Mild or moderate visual disability	- Severe - Mild - Moderate mental disability	- Severe - Mild or moderate communication disability	- Severe - Mild or moderate multiple disability				
Canada (British Columbia)	Physical disabilities or chronic health impairments	Hearing impairments	- Visual impairment - Deaf or blindness	Moderate to severe to profound intellectual disabilities		Multiple disabilities	Autism		Severe behaviour disorders	
Canada (New Brunswick)	Physical	Perceptual		Intellectual	Communicational	Multiple				

continued **Table 4.1.** Classifications of category A used in OECD member countries

Country	Physical	Hearing	Visual	Mental	Communication	Multiple	Autism	Health	Behaviour or Emotion	Others
Canada (Saskatchewan)	Orthopaedic impairments	Deaf or hard of hearing	Visual impairments	Intellectual disabilities		Multiple disabilities	Autism	Chronically ill		Traumatic brain injury
Chile	Motor deficit or disorder	Hearing deficit	Visual deficit	Mental deficiency	Serious social and communication impairments					
Czech Republic	Physical handicaps	Hearing handicaps	Sight handicaps	Mentally retarded	Speech handicaps	Multiple handicaps	Autistic	- Students in hospital - Children with poor health (pre-primary only)		Other handicaps
Finland	Physical and other impairment	Hearing impairment	Visual impairment	- Mild - Moderate or severe mental impairment	Dysphasia		Autism and Asperger's syndrome			
France	Physical handicap	- Deaf - Partially hearing	- Blind - Partially sighted	- Severe - Moderate - Mild mental handicap	Speech and language disorders	Multiply handicapped		Metabolic disorders		- Other neuro-psychological disorders - Other deficiencies
Germany	Physically handicapped	Partially hearing or deaf	Partially sighted or blind	Mentally handicapped	Handicapped in speaking	Multiple handicaps	Autism	Sick		
Greece	Physical impairments	Hearing impairments	Visual impairments	Mental impairments			Autism			Other impairments

continued **Table 4.1.** Classifications of category A used in OECD member countries

Country	Physical	Hearing	Visual	Mental	Communication	Multiple	Autism	Health	Behaviour or Emotion	Others
Hungary	Physical disability	Hearing disabilities	Visual disabilities	Moderate degree of mental disability		Multiple disabilities	Autism			
Ireland	Physically handicapped	Hearing impaired	Visually impaired	- Mild - Moderate - Severely and profoundly mentally handicapped	Specific speech and language disorder	Multiply handicapped				
Italy	- Mild - Severe physical handicap	Hearing impairment	Visual impairment	- Moderate - Severe mental handicap		Multiple handicap				
Japan	Physically disabled	Deaf and hard of hearing	Blind and partially sighted	Intellectual disabilities	Speech impaired			Health impaired	Emotionally disturbed	
Korea	Students with physical impairments	Students with hearing impairments	Students with visual impairments	Students with mental retardation	Students with speech impairments					Students with other disabilities
Luxemburg	Motor impairment	Sensory impairment		Mental impairment					Emotionally disturbed children	

continued **Table 4.1.** Classifications of category A used in OECD member countries

Country	Physical	Hearing	Visual	Mental	Communication	Multiple	Autism	Health	Behaviour or Emotion	Others
Mexico	Motor disability	- Auditory or hearing disability - Deafness or severe auditory disability	- Blindness - Partial visual disability	Intellectual disability		Multiple disability				
The Netherlands	Physically handicapped or motor impairment	- Deaf children - Hard of hearing	Visual handicap	Mental handicaps	Language and communication disabilities	Multiply handicapped		- Other health impairment - Chronic conditions requiring paediatric institutes	Behaviour disabilities	
Poland	Motion handicap	- Deaf - Partially hearing	- Blind - Partially sighted	- Light - Moderate and severe - Profound mental handicap		Multiple handicap	Autism	Chronically ill		
Slovak Republic	Physical disability	Hearing impairment	Visual impairment	- Mild - Moderate severe mental retardation	Speech disorders	Multiple impairment	Autism	Ill and physically weak children in medical facilities		

continued **Table 4.1.** Classifications of category A used in OECD member countries

Country	Physical	Hearing	Visual	Mental	Communication	Multiple	Autism	Health	Behaviour or Emotion	Others
Spain	Motor impaired	Hearing impaired	Visual impaired	Mental handicap		Multiple impairment	Serious personality disorders, psychosis, and autism	Students in hospital or with health problems		
Sweden[1]	- Pupils with impaired hearing, vision and physical disabilities - Students with impaired hearing and physical disabilities			Students with mental retardation						
Switzerland	Physical disabilities: special schools	Deaf or hard hearing: special schools	Visual handicap: special schools	-Students with a mental handicap or educable mental handicap: special schools - Students with a mental handicap or trainable mental handicap: special schools	Language disability: special schools	- Students with a mental handicap or multiply handicapped: special schools - Multiple disabilities: special schools		Chronic conditions prolonged hospitalisation: special schools	Behaviour disorders: special schools	

[1] This country is not included in the publication of 2007, but in the previous one only (2005).

continued **Table 4.1.** Classifications of category A used in OECD member countries

Country	Physical	Hearing	Visual	Mental	Communication	Multiple	Autism	Health	Behaviour or Emotion	Others
Turkey	Orthopaedic impairment	Hearing impairment	Visual impairment	- Moderate - Severe learning disability - Gifted or talented	Language and speech difficulty		Autism	Chronic illness		Neurological injury
United Kingdom (England)	Children with statements (records) of special educational needs									
United States	Orthopaedic impairments	Hearing impairments	Visual impairments	Mental retardation	Speech or language impairment	- Multiple disabilities - Deaf or blindness	Autism	Other health impairments		- Traumatic brain injury - Development delay

Starting from the analysis of these classifications, the LUDI Working Group 1 made some choices with respect to the following criteria:

- The need to adopt the most significant and useful categories for the project purposes: this means categories related to impairments that prevent children from playing freely
- The appropriateness of the terminology
- The need to avoid a proliferation of categories, rather to have broad categories with the possibility to indicate the severity of the impairment

The proposal for the LUDI Classification of disabilities[13] is reported in Table 4.2:

Table 4.2. LUDI Classification of disabilities

LUDI categories of disabilities
Mental or intellectual disability (mild, moderate, severe, profound)
Hearing impairments (partially hearing impaired – deaf)
Visual impairments (partially sighted – blind)
Communication disorders (language disorders)
Physical impairments (mild, moderate, severe)
Autism spectrum disorders
Multiple disabilities

4.3 Description of the LUDI Categories of Childhood Disabilities

The categories identified within the LUDI Classification of disabilities are described and defined as follows, by referring to two main international sources: the WHO International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10, 2010) and the Diagnostic and Statistical Manual of Mental Disorders 5th edition, published by the American Psychiatric Association (2013). Whenever

13 The LUDI categories of disabilities may also consider 'invisible disabilities' for project purposes. The term 'invisible' refers to disabilities that are less visible than other physical, sensory, or mobility impairments, and that are prevalent but commonly under recognised (Gaines et al., 2008; Missiuna et al., 2006). This category encompasses a heterogeneous group of major and minor neurodevelopmental disorders, attention deficit disorders, developmental coordination disorders, and specific learning disorders that may compromise play participation. While these conditions are defined in the Diagnostic and Statistical Manual of Mental Disorders 5th edition (APA, 2013), the affected children may be more subject to misconceptions regarding the legitimacy of their play difficulties and need of support to play. However, numerous researches have highlighted the need to be concerned by the consequences of neurodevelopmental disorder on children's playfulness and participation in play (Kennedy-Behr et al., 2013; Leipold & Bundy, 2000; Poulsen & Ziviani, 2004; Unhjem et al., 2014).

needed, reference will be also made to other sources and documents, because the two main documents aforementioned were not exhaustive for a functional description of all categories of childhood disabilities of LUDI.

4.3.1 Intellectual Disabilities

In the DSM-5, the neurodevelopmental disorders include three types of intellectual disabilities: the intellectual disability, the global developmental delay, and the unspecified intellectual disability. The intellectual disability should meet the following three criteria:

a) Deficits in intellectual functions: reasoning, problem-solving, planning, abstract thinking, judgement, academic learning, and experiential learning
b) Deficits in adaptive functioning involving three domains: conceptual, social, and practical, so that ongoing support is needed to meet the developmental and socio-cultural standards for personal independence and social responsibility; limits are related to one or more daily life activities, such as social participation, communication, independent living in several life contexts (home, school, work, and recreation)
c) Onset of intellectual and adaptive deficits during the infancy and childhood

The intellectual functioning is conventionally estimated through standardised and validated intelligence tests, and usually, a score lower than at least two standard deviations from the average represents a cognitive delay. The adaptive functioning is estimated by scales assessing social adaptation in a given environment. These measures provide an approximate indication of the degree of intellectual impairment. The diagnosis will also depend on the overall assessment of intellectual functioning by a skilled diagnostician.

Intellectual abilities and social adaptation may change over time, and, however poor, may improve as a result of training and rehabilitation. Diagnosis should be based on the current levels of functioning.

The DSM-5 includes the following levels of severity of the intellectual disability:

- Mild - Approximate IQ range of 55 to 70 (mental age from 8 to under 11 years). Likely to result in some learning difficulties in school. During adulthood, persons with mild intellectual impairment show social and occupational abilities that allow them to live autonomously, although they may need some degree of support.
- Moderate - Approximate IQ range of 40 to 55 (mental age from 4 to under 7 years). Likely to result in marked developmental delays in childhood, but most persons can learn to develop some degree of independence in self-care and acquire adequate communication and academic skills.
- Severe - Approximate IQ range of 25 to 40 (mental age from 18 months to under 4 years). Likely to result in continuous need of support.

– Profound - IQ under 25 (mental age below 18 months). Likely to result in severe limitation in self-care, continence, communication, and mobility.

4.3.2 Hearing Impairments

For the elaboration of the description in this category and the following – the visual impairments – two separate sources found on the Web have been used; the first is a document, the Kentucky's Office for the Americans with Disabilities Act, produced by the Kentucky Education and Workforce Development Cabinet[14]. The second source is located within the WHO website, in the section dedicated to the Media Centre, in particular in the 'Fact Sheet', in relation to the definition of deafness and hearing loss[15].

The hearing impairments are defined as a hearing loss that prevents a person from totally receiving sounds through the ear. There are four types of hearing losses:

– Conductive: Caused by diseases or obstructions in the outer or middle ear, which usually affect all frequencies of hearing. A hearing aid generally helps a person with a conductive hearing loss.
– Sensorineural: Results from damage to the inner ear. This loss can range from mild to profound, and often affects certain frequencies more than others. Sounds are often distorted, even with a hearing aid.
– Mixed: Occurs in both the inner and outer or middle ear.
– Central: Results from damage to the central nervous system.

Hearing loss may be mild, moderate, severe, or profound. It can affect one ear or both ears, and leads to difficulty in hearing conversational speech or loud sounds. 'Hard of hearing' refers to people with hearing loss ranging from mild to severe. They usually communicate through spoken language and can benefit from hearing aids, captioning, and assistive listening devices. People with more significant hearing losses may benefit from cochlear implants. 'Deaf' people mostly have profound hearing loss, which implies very little or no hearing.

4.3.3 Visual Impairments

Visual impairment is a functional limitation of the vision system, which cannot be recovered by usual means (glasses, for instance). It leads to loss of visual acuity, loss of visual field, visual distortion, or visual perception difficulties. Visual impairments

14 Retrieved from: http://www.ada.ky.gov/hearing_imp_def.htm.
15 Retrieved from: http://www.who.int/mediacentre/factsheets/fs300/en/.

range from partial to total loss of sight. Visual impairment is defined as a best-corrected visual acuity between 20/70 and 20/1200 (foot, accordingly to the Snellen chart, 1862), and blindness is defined as a visual acuity worse than 20/1200 with the best possible correction. There are four levels of visual impairments, according to the ICD-10:

- Mild visual impairment: Acuity equal to or better than 20/70.
- Moderate visual impairment: Acuity worse than 20/70 or equal to 20/200.
- Severe visual impairment: Acuity worse than 20/400 or equal to 20/1200.
- Blindness: Acuity worse than 20/1200.

The definition of 'legally blindness' varies from country to country. The assistance that a person with a visual impairment requires depends on the degree of sight loss and when the loss occurred. A person who is visually impaired may use magnifying glasses, enlarged print, or other strategies. A person who is legally blind relies more on the other senses to perceive the world, but still can be completely independent. This person may use a cane or a service dog, also called a 'guide dog'.[16]

4.3.4 Communication Disorders

This category is presented in the DSM-5 in the chapter on neurodevelopmental disorders, and includes deficits in language, speech, and communication. In particular, with regard to play and the aims of the project, only one category within communication disorders will be considered, that is the language disorder. The DSM-5 defines language as "the form, function, and use of a conventional system of symbols (i.e., spoken words, sign language, written words, pictures) in a rule-governed manner for communication" (2013: 41).

Language disorder is characterised by persistent difficulties in the acquisition and use of spoken, written, or sign language; deficits in comprehension or production include a reduced vocabulary, limited sentence structure, and impairments in discourse. The disorder emerged in early age and is not due to hearing, sensory, motor, or other neurological impairments. Language disorder affects communication, social participation, and occupational performances.

4.3.5 Physical Impairments

A physical impairment is permanent and substantially limits physical ability or motor skills. The physical capacity to move, coordinate actions, or perform physical activities

16 http://www.ada.ky.gov/vis_imp_def.htm.

is impaired, and the child faces challenges in one or more of the following areas: physical and motor tasks. independent movement, performing basic life functions.

Physical impairment can be either congenital or acquired. Children with congenital conditions are either born with physical difficulties or develop them soon after birth. Acquired disabilities are those developed through injury or disease while the child is developing normally. The age at which a condition develops often determines its impact on the child. Physical impairments can also be progressive or chronic. Physical impairments can be related to a problem to the performing system (skeleton, neuromuscular system, joints) or to the directive system (central nervous system), and in this last case, it can be specific or nonspecific.

Examples of impairments of the first type are muscular dystrophy, achondroplasia, juvenile rheumatoid arthritis, and so on; examples of the second type are cerebral palsy, ataxia, traumatic brain injury, neural tube defects, spinal cord injury, and so on.

Possible subdivisions (mild, moderate, severe) can be related to the physical extension of the impairment (i.e., number of limbs involved, presence of spasms or other forms of dyskinesia, extension and level of the neurologic injury, and so on). Unlike other categories and for intervention purposes, these subdivisions can be related to the extension of the needed support: slight support (mild); substantial support (moderate); very substantial support (severe).

4.3.6 Autism Spectrum Disorders

This category is included in the DSM-5 within the chapter on neurodevelopmental disorders, and can be identified through two main criteria:

a. Persistent deficits in social communication and social interaction across multiple contexts as manifested by the following: deficits in social-emotional reciprocity, deficits in nonverbal communicative behaviours used for social interaction, and deficits in developing, maintaining, and understanding relationships
b. Restricted, repetitive patterns of behaviour, interest, or activities as manifested by at least two of the following: stereotyped or repetitive motor movement, use of objects or speech; insistence on sameness; inflexible adherence to routines, or ritualised patterns of verbal or nonverbal behaviour; highly restricted, fixated interest that are abnormal in intensity or focus; and hyper or hyporeactivity to sensory input or unusual interest in sensory aspects of the environment

The severity specifiers may be used to describe the child's symptomatology with the recognition that severity may vary by context and fluctuate over time. Severity of social communication difficulties and restricted, repetitive behaviours should be separately rated.

Level 1 – Requiring support
- Social communication: Without support in place, deficits cause noticeable impairments: difficulty initiating social interactions, and clear examples of atypical or unsuccessful responses to social overtures of others are present; the child may appear to have decreased interest in social interactions.
- Restricted, repetitive behaviours: Inflexibility of behaviour causes insignificant interference with functioning in one or more contexts; difficulty in switching between activities. Problems of organisation and planning hamper independence.

Level 2 - Requiring substantial support
- Social communication: Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; reduced or abnormal responses to social overtures from others.
- Restricted, repetitive behaviours: Inflexibility of behaviour, difficulty coping with change, or other restricted or repetitive behaviours appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts; distress and/or difficulty changing focus or action.

Level 3 - Requiring very substantial support
- Social communication: Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others.
- Restricted, repetitive behaviours: Inflexibility of behaviour, extreme difficulty coping with change, or other restricted or repetitive behaviours markedly interfere with functioning in all spheres; great distress and/or difficulty changing focus or action.

4.3.7 Multiple Disabilities

In literature, there is not an international consensus about the definition of multiple disabilities, because children with multiple disabilities show combination of concomitant impairments at physical, motor, intellectual, sensory, or communicative level.

The World Health Organisation defines a child with multiple impairments as a child with a significant physical disability combined with a sensory and/or cognitive disability (WHO, 1996:4). According to the Individuals with Disabilities Education Act (IDEA, U.S. Congress; 1975, 2004), a law by the U.S. Department of Education, the combination of multiple disabilities "causes such severe educational

needs that cannot be accommodated in special education programs solely for one of the impairments". Thus, each child with multiple impairment shows a specific condition that can dramatically vary in respect to general intelligence, gross and fine motor skills, language, and social adaptation. Comorbidity with behavioural or psychological problems is common in children with multiple disabilities (Cadman et al., 1987).

According to the LUDI goal, which is to foster and guarantee play for the sake of play for disabled children, multiple disabilities are defined as a condition in which a sensory impairment is associated with another of the six disabilities listed before. In fact, the sensory channel is a fruitful mean to playfully interact with the child with disability and its damage brings additional challenges that need to be addressed and overcome.

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