# 4 Definition of Disability

Understandings of disability have evolved considerably over time. The traditional medical model views disability as a feature of the person directly caused by injury or disease, congenital or acquired and as a problem requiring medical or other intervention. The focus of this model is cure and/or care, and it is associated with approaches that seek to 'fix' the minds/bodies of individuals. In contrast, the social model of disability views disability as a socially created problem that can only be solved through societal solutions – by the removal of disabling barriers (be they physical, economic, political, social, cultural and so on). From this perspective, focusing on a person's impairment or difference solely, or predominantly, is problematic. This approach demands a societal response, since the problem is created by an un-accommodating physical, cultural, social and economic environment that is structured around the needs of a mythical able-bodied population.

The ICF (2002) and the ICF-CY (2007) were developed to classify health characteristics based on an integrated view of health and well-being. The model of disability supported by the ICF is the biopsychosocial model, which is an integration of these approaches (individual/medical and social models): *biological, psychological and social*. The ICF is the WHO framework for classification of health and disability at both individual and population levels and is officially endorsed by all 191 WHO Member States as the international standard to describe and measure health and disability. The ICF model is represented diagrammatically in Figure 4.1. This diagram demonstrates how the ICF includes constructs that capture functioning (impairment) and disability.
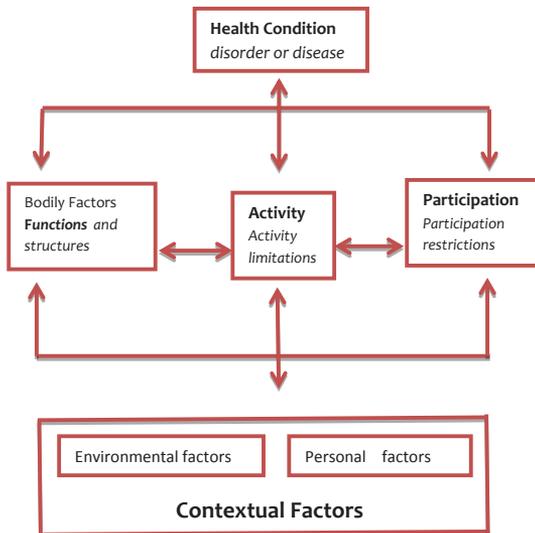
Figure 4.1. The ICF – CY Model including constructs capturing functioning and disability. Adapted from Simeonsson (2009) and WHO (2007)

The ICF (2002) model clearly acknowledges that 'on their own, neither a social nor medical model is adequate, although both are partially valid' (WHO 2002, pp.9). The ICF recognises that disability is a complex phenomenon denoting the negative aspects of the interaction between an individual (with a health condition) and contextual factors. Thus, this is a relational concept of disability.

4.1 How many children with disabilities are there?

The WHO and the World Bank estimate that there are more than a billion persons with disabilities worldwide (WHO, 2012). This is approximately 15% of the world's population. Estimates of the prevalence of children and young persons with disabilities vary significantly, depending on the definition and measures used. Currently, there are no reliable and representative estimates based on actual measurement of the number of children and young persons with disabilities (Maulik and Darmstadt, 2007; WHO, 2011). Furthermore, the limitations of census and general household surveys to capture childhood disability and the absence of registries in many developing countries contribute to lower estimates (UNICEF, 2008).

The Global Burden of Disease (2008) estimates the number of children and young people aged 0–14 years experiencing 'moderate or severe disability' to be 93 million (5.1%), with 13 million (0.7%) children experiencing severe difficulties (2008). UNICEF (2005/6) estimated the number of children with disabilities younger than 18 years to be 150 million. A review of the literature from developing countries reports child disability prevalence from 0.4% to 12.7% depending on the study and assessment tool (Maulik and Darmstadt, 2007). Many of the problems in identifying and characterising disability are a result of the absence of cultural and language-specific tools for assessment (Hartley and Newton, 2009). This latter point may account, in part, for the variation in prevalence figures and suggests that children with disabilities are not being identified or receiving the services that they need, globally.

4.2 Barriers to play and recreation

> *Multiple barriers* impede access by children with disabilities to the rights provided for in Article 31, including exclusion from school, informal and social arenas where friendships are formed and where play and recreation take place, isolation at the home, cultural attitudes and negative stereotypes which are hostile to and rejecting of children with disabilities, physical inaccessibility [......] policies that exclude [......] communication barriers [......] *Pro-active measures are needed to remove barriers and promote accessibility to and availability of inclusive opportunities for children with disabilities to participate in all these activities* (General Comment 17. 50, pp.16).

General Comments 17 and 9 clearly acknowledge the 'multiple barriers' faced by children with disabilities to engage in a meaningful way in self-selected play and recreation in physical spaces of their choice. Therefore, we have formatted the following section of this book to examine the available published literature that focuses on play with children with disabilities under four main locations or play spaces: the home, the school, the built environment and the natural environment. While acknowledging that these terms/physical spaces are not mutually exclusive, we provide broad definitions of each to focus the discussion.

5 The Home, Educational, Built and Natural Environments

5.1 Home environment

The term 'home' has many multilayered and multifaceted dimensions, which make it difficult to define explicitly or describe objectively (Benjamin, 1995; Moore, 2000; Rapoport, 1995). A sophisticated collection of literature focusing on the meaning of home exists across academic disciplines. Within this literature, there is a certain consistency in core ideas. For example, terms such as privacy, security, family, intimacy, comfort and control dominate most definitions of 'home' (Putnam and Newton, 1990). In addition, recurrent meanings for home such as a place of retreat, safety, relaxation, self-expression, continuity, freedom, independence, social status, refuge, permanence, ownership, financial asset and self-identity indicate that both empirical and theoretical research are talking about the same construct (Allen, 2008; Somerville, 1997). The home can be a concrete physical object and an abstract term reflecting an individual's relationship with that object and can consist of multiple diverse situations or permutations of 'home' (Nilsen and Rogers, 2005). In its everyday usage, the term 'home' can be used to describe many types of environments in multiple geographic locations and scale but does not discriminate or distinguish between them. For children with disabilities, home may include temporary care settings such as hospitals and institutions or long-term settings such as orphanages.

5.2 Educational settings

Within this book, the term 'educational settings' is defined as any setting where one can receive an educational experience such as kindergarten, primary and secondary schools. Educational settings can be formal or informal such as school playgrounds, after-school-clubs and so forth. Both formal and informal educational settings should provide a safe learning environment in which children's developmental needs can be met and in which active learning can take place (Moyles, 2013). Furthermore, formal and informal educational settings are places or spaces enabling children to make links between their internal being and external reality, make relationships with others, learn to discriminate and make judgments, investigate and create and imagine and formulate ideas. Thus, the home is also the dominant non-formal educational setting in which learning and child development needs are met. It must also be acknowledged that within educational settings, children are all unique, and some children with and without disabilities need more 'playfulness' and 'action' than others.

5.3 The built environment

Within this book, the term 'built environment' is viewed as that part of the physical environment that is constructed by human activity (Saelens and Handy, 2008). Urban planners use an assortment of terminologies when defining aspects of the built environment, which may appear interchangeable; however, the distinctions among these are important. 'Urban design' usually refers to the design of cities and the physical elements within them and is concerned with the function and appeal of public spaces such as parks. 'Land use' typically refers to the distribution of activities across space, including the location and density of different activities, such as residential, commercial, industrial and other activities. The 'transportation system' includes the physical infrastructure of roads, sidewalks, bike paths, railroad tracks, bridges and so forth.

Thus, the built environment comprises urban design, land use, the transportation system and encompasses multiple patterns of human activity within the physical environment (Handy et al., 2002). A core concept for evaluating social inclusion and the built environment is that of universal design, also known as building-for-all or barrier-free design (Iwarsson and Stahl, 2003). This concept includes two core aspects: accessibility and usability. Accessibility can be defined as the ability of a person to utilise the design features of the environment, for example, to use a slope rather than steps. Accessibility also refers to compliance with standard guidelines for accessible environments. Usability refers to the ability of a person to access and use the environment on equal terms with others: it relates to function (see also ISO 2008 for helpful definitions of these concepts). Both accessibility and usability are vitally important.

Within the built environment, children's neighbourhood places are considered to be 'community open spaces and communal facilities in a neighborhood that children consider as being especially important to them in terms of psychological, behavioral, and symbolic meaning' (Min and Lee, 2006, pp. 51). In relation to built environments and play, specific contexts, therefore, include playgrounds, parks and neighbourhood play spaces.

5.4 The natural environment

Any definition of the term 'natural environment' is dependent on context rather than a set definition. For the purpose of this work, the term 'natural environment' comprises all living and non-living things that occur naturally. It also includes a continuum of human–environment influence, ranging from total human-designed space to 'pure' wilderness (Carver et al., 2002). Natural environments have been defined as 'environments not designed or cultivated by humans' (Fjørtoft 2004, p24). Today, however, most natural environments that children encounter are the

product of interaction between nature and humans, for example, suburban gardens (Tuan, 1978). Thus, in an urban context, a child may have daily access to a range of natural spaces with varying degrees of human design and modifications (Lester and Maudsley, 2007).