

1 Disability and the environment

The 'social model of disability' was pioneered in the late 1960s and early 1970s, and continued to gain momentum and acceptance in the decades that followed. This model, introduced by people with disabilities, civil/human rights activists and social theorists, specified that disability is not simply a manifestation of a person's impairment, but rather a complex phenomenon, created in part by features of the physical and social world. It is the environment that acts to facilitate integration or contribute to isolation, influencing a person's ability to participate in society (see Bickenbach et al. 1999 for a review).

The recognition of the environment's influence on the experience of disability and the implementation of Disability Discrimination Acts in various countries have led to the development and implementation of programs and initiatives for improving the environment experienced by a person with disabilities. Some examples include:

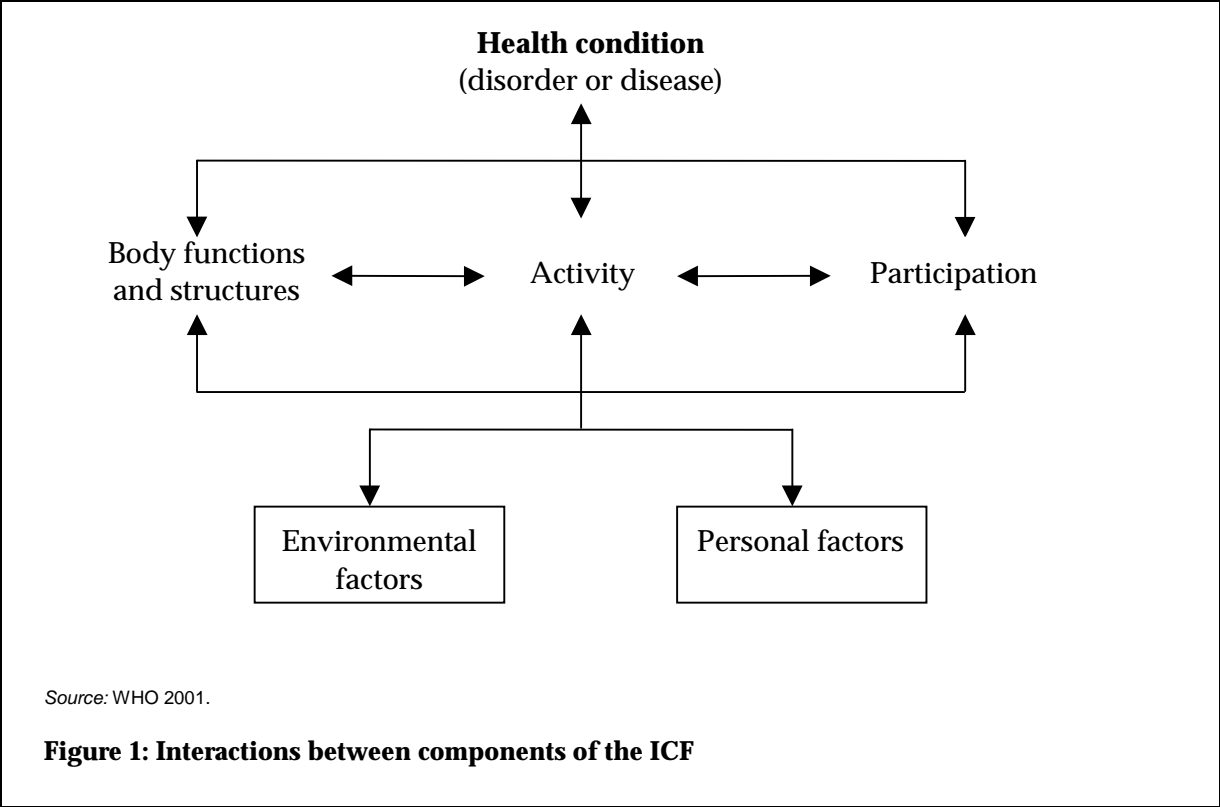
- The concept of Universal Design, where the underlying principle is the design of products, buildings and environments that are useable by *all* people (see Mace et al. 1991). Issues such as accessibility, safety, individual ability and efficiency underpin the design of articles that make up the physical world, from buildings and forms of transportation to computer and Internet access, and products used in the home.
- Integration of students with disabilities into mainstream or regular educational settings. Enabling students with disabilities to participate in a regular education setting is thought to improve rather than hinder both academic and social learning (e.g. Center and Curry 1993; Wang and Baker 1986). Furthermore it improves their chances of participating in the future, instead of setting them on 'a straight pathway to a segregated life' (Uditsky 2002).
- Schemes for the provision of aids and equipment, where individuals receive cost-free or low-cost equipment to help their performance of daily activities, such as self-care and mobility in and outside the house, and facilitate participation in sport, work, education and other activities.
- Improvement of standards for accessible public transport. Transport is a fundamental human right, including having ready access to safe and disability-friendly forms of public transport, but remains a common problem for people with disabilities (see AIHW 2002). There have been recent developments in Australia, such as the implementation of the Disability Standards for Accessible Public Transport, passed by Parliament in October 2002.

1.1 The International Classification of Functioning, Disability and Health (ICF)

Environmental factors are recognised by the International Classification of Functioning, Disability and Health¹ (ICF) as one of three components defining functioning and disability (WHO 2001). The other two components are Body Functions and Structures and Activities and Participation (see Figure 1 and WHO 2001). The inclusion of environmental factors represents an important new component to the classification.

¹ The World Health Assembly endorsed the ICF in June 2001.

Environmental factors make up the physical, social and attitudinal environment in which people live and conduct their lives. These influence the experience of disability both at the body and in terms of the activities they do and the areas of life in which they participate, affecting a person’s impairment extent, activity limitation and/or participation restriction.



The ICF groups environmental factors into five chapters (WHO 2001). These are:

- Products and technology, i.e. natural and human-made products and systems of products, equipment and technology
- Natural environment and human-made changes to environment, i.e. animate and inanimate elements of the natural and physical environment, and components of that environment that have been modified
- Support and relationships, i.e. people or animals that provide practical physical or emotional support, nurturing, protection, assistance, and relationships to other persons, in the home, place of work, school or at play
- Attitudes, i.e. attitudes that reflect the observable consequences of customs, practices, ideologies, values, norms, factual beliefs and religious beliefs
- Services, systems and policies, i.e. services that provide benefits, structure programs and operations to meet the needs of individuals, systems designed to organise, control and monitor these services and policies that govern and organise the systems that organise, control and monitor services.

Environmental factors may act either as facilitators or barriers to an individual, enhancing or hindering their performance. Different environments therefore may have very different impacts on the same individual with a given health condition.

1.2 Objectives and structure of the report

In this report we examine information available in Australia on this important component of disability. It includes a discussion of some of the environmental factors recognised by the ICF as influencing the experience of disability—aids and equipment, home modifications, educational settings, support arrangements provided at school and in the workplace, access to public transport and receipt of assistance for daily activities.

The primary focus of the report, however, is aids and equipment and their use by people with disabilities in Australia. Aids and equipment have long been recognised as an environmental factor with the potential to improve the quality of life of people with disabilities, allowing greater independence and reduced reliance on personal assistance. Aids and equipment have also received more attention in the disability literature than other environmental factors, with the possible exception of the built environment.

The majority of data regarding the use of aids and equipment come from the United States or Europe, with little research being undertaken in Australia. This report aims to fill this gap by providing a picture of the current status of provision and use of aids and equipment by people with disabilities in Australia, and the factors associated with this use.

The structure of the report is as follows:

Chapter 2 identifies some of the current definitions of aids and equipment specific to people with disabilities, and describes the kinds of equipment available in Australia and the Commonwealth and relevant state/territory based schemes operating in Australia. Issues of eligibility, priority and funding are discussed, as is reported cases of unmet need for aids and equipment.

Chapter 3 reviews the literature on the use of aids and equipment in other countries, the efficacy of aid and equipment use, both overall and compared to personal assistance, and factors identified as being associated with the use and abandonment of aids and equipment.

Chapter 4 presents analyses of the 1998 ABS Survey of Disability, Ageing and Carers and describes prevalence of the use of aids and equipment by age group, severity of restriction, main disabling condition, need for personal assistance and the use of a primary carer. The types of equipment (e.g. mobility aids, communication aids) used by different demographic groups is also investigated.

Chapter 5 focuses on some of the other environmental factors relevant to people with disabilities. Environmental factors covered in the Survey of Disability, Ageing and Carers and presented in this chapter include support arrangements provided in educational and workplace settings, receipt of assistance for daily activities, availability of public transport and home modifications.