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Infrastructure and its Consequences for the
Employment of People with Physically and Sensory
Disabilities

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0. **Abstract**

Employment for most people is the norm yet Samoy (1997) suggests that people with a disability are disadvantaged, through a lack of employment opportunities, as a result of an impairment or disability. This study will look at the prospects of people with a disability being employed in Ireland. It will examine the barriers that are confronted on a daily basis, and the attitudes that support them.

Employers, who do not employ people with disabilities, see problems associated with their employment according to a report in Britain on 'Employers Attitudes Towards People with Disabilities'. Yet records of employed disabled people show that their time keeping, attendance, and safety in the work place compares very favourably to their non disabled associates (Cornes, 1984).

This study will also examine the gap that exists between the needs of people with disabilities, the requirements of the employers and ways in which these gaps can be filled.

1. **Research Question.**

How does infrastructure determine the employment of people with a physical disabilities in Ireland ?

Definition of Disability

Disability refers to the various human differences. Some people are born with these differences and most others acquire some as they get older. Oliver (1990) defines disability as the 'social experience of people with some form of physical impairment to a limb, organism or mechanism of the body'. The following definition of disability taken from The Employment Equality Act, 1998 and the Equal Status Act, 2000; will be used for the purpose of this study.

Disability means-

- (a) the total or partial absence of a person's bodily or mental functions, including the absence of a part of a person's body,
- (b) the presence in the body of organisms causing, or likely to cause, chronic disease or illness,
- (c) the malfunction, malformation or disfigurement of a part of a person's body,
- (d) a condition or malfunction which results in a person learning differently from a person without the condition or malfunction.
- (e) a condition, disease or illness which affects a person's thought process, perception of reality, emotions or judgement or which results in disturbed behaviour'

This definition will be applied to people born with disabilities and people who acquire them through their lifetime. This study will focus on people between the ages of eighteen and sixty five who aspire to employment and are included in parts (a), (b), and (c). For the purpose of this study, part (d) and (e) of the definition will not be examined.

2. Literature Review

In a recent study on 'attitudes to disability in Ireland' (NDA, 2002) the public showed a desire to see people with disabilities treated fairly. They were aware that barriers existed in the areas of transport, access and education and wished to see these barriers lowered or removed. While these attitudes exist, and changes are being made in legislation, little has changed for people with disabilities. There are still many journal and newspaper articles about the barriers faced by people with disabilities in their every day life.

The Barriers Faced by People with Disabilities

A disabling barrier is something that prevents people with disabilities from being able to participate in every day activities. This study will look at environmental barriers like inaccessible building and transport, and some institutional barriers like education in Ireland.

In the USA there are statutory regulations recognizing that disabling barriers for people with disabilities are a dimension of civil liberties. Oliver (1990) points out that since the signing of the American Disability Act, regulations that were once voluntary have now become obligatory. In Great Britain the onus is on people themselves to fight for their rights; and as people with disabilities are often unemployed, and poor, they can hardly 'afford' to fight for their consumer rights. (Imrie, 1996b, Oliver 1990) This study will look at the background situation in Ireland to see how effective recent bills and statutory regulations are.

Access and Transport

As people get older, or as people acquire disabilities like heart disease or strokes their experiences change in respect to their built environment. People are affected by different characteristics of the physical environment depending on their type of disability. Steps, while being a barrier faced by ambulatory disabled, are not such a barrier to people with sensory disabilities. The Council on Tall Buildings for Handicapped and Aged Persons in the USA noted that people develop ways of coping with their disability that moderate the effects of barriers. Some people use their many resources and skills and are very capable while others are less competent in dealing with their environment. Lawton and Nahemow (1973) looked at the amount of demands in the environment and applied motivational theories in the way people overcome these demands. They conclude that social expectations and pressures can make a difficult environment even more complicated.

The goal of a barrier-free environment is to support independence in every day activities. It is often these barriers that emphasise difference, and create a handicap (Raschko, 1982). Independence of our environment gives a feeling of self-worth. If people must phone ahead in railway stations for ramps to be provided, or get special keys to use bathroom facilities, or have to use a side or back entrance to gain access to buildings, they have no option but to be dependent. An environment unfit for people to live in makes them unhappy, frustrated and negative according to Lawton and Nahemow (1973). Morgan (1976) warns us that a barrier free design will not reduce the number of people with disabilities, but it will reduce the number of people who are dependent.. Napolitano (1996) reminds us that barrier free design has a psychological as well as a physical dimension. An inclusive design gives a positive and welcoming message. This psychological message is totally lost if people must use a back entrance to a building or must wait on a train till a ramp can be found.

Transport

Gleeson (1999) made reference to the many barriers that people with a physically and sensory disability face in disabling cities. Transport and access to buildings have always impinged on the lives of people with a disability. Freund (2001) recognised the paradox that while people with disabilities encounter many physical obstacles while traveling to work, most modes of transport are man-made. In a study by the Open University they suggest that the use of wheel chairs and the inability to walk should no longer place limitations on a person's mobility. Yet the transport system takes for granted that drivers, passengers and pedestrians do not have physical or sensory disabilities (Gleeson, 1999).

Ideal transport is a mix of barrier free trains, busses, taxis, planes. Also included are footpaths, stations, vehicles, platforms, bus stops and most

importantly an inclusive attitude. Heiser, (1995) points out that in most surveys busses and underground systems have proven to be inaccessible; therefore, most people with disabilities travel by car. Most public transport is therefore exclusive and restricts people traveling to their place of employment. Making busses wheelchair accessible would increase the cost by approximately 1% of the total cost of the vehicle. Most vehicles are operational for 20 years making the cost one twentieth of 1% per annum (Heiser, 1995).

Access

Handicap is described in Building Design for Handicapped and Aged Persons as 'the inability of physical environment or settings to allow all persons, including but not limited to persons with disabilities to make full use of the settings'. Berthoud *et al* (1993) note that most building are accessed by steps, so ability to utilise steps takes on a huge importance to people trying to gain and retain employment. Steps could be considered a 'handicap' for people using a wheelchair, our aged, or parents who use buggies to transport their small children. Yet most buildings in Ireland, particularly older buildings can only be accessed by steps. In building regulations guidance document M 2000, it says that the alteration of an existing building for people with disabilities, particularly one of historic or architectural interest may not be 'appropriate'. In a journal for the Royal Institute of Architects of Ireland in 2002, architects were still being warned to comply with the law as building continued to be constructed outside the terms of the regulations. Walker (1995) worries that having regulations specifically for people with disabilities makes them different from everybody else. He suggests that accessibility should be for everyone.

Napolitano (1996) realised that for the disabled a barrier free environment would include wide doors, ramps, lifts and specialized bathroom facilities. These architectural changes would give people with a disability a freedom of movement. Technology is also available to make peoples movement through space more inclusive, with voice and visual indicators, lifts with horizontal controls and doors that open automatically, Walker (1995). As Napolitano (1996) concludes simply by putting in a ramp, a barrier to disability has been removed. Yet Napolitano, argues the point with herself, that barriers require great understanding, and make the lives of people with disabilities incredibly complex and these complexities cannot simply be removed 'by putting in a ramp'.

Education

Life, and therefore employment prospects begin long before eighteen years of age. Education is a major influence on employment. A lack of access to mainstream education is a reflection of the attitudes and barriers that exist for people with disabilities (NDA, 2000). For many years people with disabilities were educated in specialised schools, this isolated style of education now reflects their low self esteem and their low expectations in employment. The

study will reflect how inclusive our education system is for people with disabilities and it will study the results of segregated education in Ireland.

Supports for Employers and Employees.

Supports exist for both employers and employees alike. They include employer support schemes, work place equipment grants and work place adaptation grants to encourage employers to employ people with disabilities. The 'take up' on these grants and schemes and their effectiveness will be studied.

Assistive Technology

For many, employing the use of assistive technology enables individuals with a disability to participate on equal terms with non disabled people. The workplace can be transformed with some knowledge, thought and often very little expense, to enable full participation by the individual with a disability. Both assistive technology and postural management will be examined in this study, so that equal attention will be given to the person's physical and intellectual environment. King (1999) discussed different forms of assistive technology: some people may require a strong pair of glasses while others may need more detailed assessment to find out their special needs, limitations and capabilities. Most changes made in assisting people with disabilities also assist able-bodied members of society.

With the assistance of technology, work need not necessarily be confined to offices and multi--storied buildings. Michalkakis (2001) felt that many people with a disability could bypass issues of transport and access by working from their homes. The use of technology could give access to jobs beyond reach before.

3. Methodology

The literature review will be used to develop theory relating the concepts of infrastructure and potential employment for the physically disabled. Hypotheses will be stated from the developed theory relating concepts of infrastructure and aspects of employment for the physically disabled.

The research methodology will include both quantitative and qualitative methods (Blaxter, Hughes and Tight, 2001). The quantitative data will be collected through questions with multiple choice or dichotomous answers (Brannick and Roche, (1997). It is estimated that time allowance for filling in the questionnaire will have to be elongated as some communication barriers may be experienced.

Any communication difficulties will be overcome by a choice of two types of questionnaire: hard copy and computer questionnaires. People with visual

impairment use assistive technology to read from their computer, so a soft copy of the questionnaire will be available.

Data or evidence will be collated using SPSS and this data or evidence will be used to test the hypotheses. Conclusions will be drawn and recommendations made. Limitations will be stated.

Qualitative data will be collected through Focus Groups meetings. A group of six to nine employers will be assembled for approximately an hour and a half with five questions to discuss. Word techniques will then be used to analyse the data e.g. word repetition, key words in Context and compare and contrast.

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