

# Occupational Disability

The Approaches of Government,  
Industry and the Universities

Edited by W. T. Singleton  
and L. M. Debney

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of Government, Industry  
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Edited by

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and  
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# **Occupational Disability**

This book is the first attempt to summarize in one volume all the wide range of issues surrounding the assessment of occupational disability. It is the outcome of a series of projects conducted by the Applied Psychology Department, University of Aston in Birmingham which involved consultation with specialists in all the relevant disciplines including medicine, anatomy, physiology, psychology, sociology, economics, ergonomics, engineering, the law and government. The discussion is directed towards the layman who wishes to understand the overall scene. There is detailed discussion of all the complexities of terminology to do with disease, impairment, disability and handicap. This is followed by a consideration of social, legal, government and economic aspects. The core of the book is a section dealing with assessment of receptor (eyes and ears), central (psychological processes) and effector (motor activities, strength and mobility) functions. There are particular problems of the young disabled and these are dealt with in a section covering changes in disease and handicap, the disadvantaged school-leaver, the transition from school to work, the objectives of special schools and occupational guidance for young people. The specific issue of relating the disabled to the work situation is described in chapters dealing with employment rehabilitation, medical rehabilitation, industry-based rehabilitation, and the views of employers, large companies and the resettlement specialists. The final section reviews the needs for further research as seen by research workers and from government.

The book should interest occupational health doctors and nurses; health and safety personnel; psychologists, sociologists, behavioural scientists, administrators, personnel management, disablement resettlement officers, relevant social service personnel; also undergraduate, postgraduate and post-experience students at universities, polytechnics and technical colleges studying social science, health sciences and occupational health.

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# Section I

## **Introduction**



# 1

## Introduction

W. T. SINGLETON

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This book is based on research carried out under the auspices of the EEC Social Affairs Division and the University of Aston in Birmingham. The first project from 1977 to 1979 surveyed the situation regarding occupational disability throughout Europe; succeeding studies are now in progress. Within the main survey considerable attention was devoted to the views of United Kingdom specialists in the field, so it seemed appropriate to collect their views together to make them available to a wider audience.

There is, of course, very widespread interest in, and concern about, disability in all European countries and indeed throughout the world, including the developing countries. This is both because of the size of the problem (commonly estimated at about 10% of any population) and because of the greater consensus between and within countries about the importance of equality of opportunity for all citizens. Obviously this must include the disabled. However, providing each disabled person with appropriate services, which ensure that his opportunities are not manifestly different from those fortunate enough to be physically and mentally fit, is clearly a complex and large-scale business. Governments at national and local levels are involved in devising and administering an almost infinite variety of schemes for providing support. These can vary from direct subventions, in the form of invalidity pensions, through the provision of specialist centres, personnel and equipment, to indirect methods such as tax concessions for organizations employing disabled workers. Industry is involved, particularly in the reallocation of jobs to those disabled by accidents and by progressive diseases, with the employment of the disabled school-leavers and to a much lesser extent with accepting older disabled

people as new employees. Universities and other research centres are involved in developing knowledge and skills in many different areas, from clinical medicine to manpower planning.

Many different approaches to such a diverse area are possible, and in fact desirable. The extremes are typified by the pragmatic approach and the conceptual approach. The pragmatist proceeds by dealing with each disabled person as a separate case and eschews generalizations on the grounds that each case is different and the whole field is too large and interdisciplinary to warrant any general theory. The conceptualist would argue that, on the contrary, because the field is so large and difficult we must have some good theoretical understanding of what we are talking about and doing. Most work in this field is between these two extremes. The Aston/EEC project is near the conceptual end of the spectrum, in the importance attached to having a conceptual map of the problem area, but there are applied criteria also, in that there is an orientation towards improving the techniques used to assess and describe the disabled.

There are many difficulties in pursuing any general theory of occupational disability. Very few research groups or individuals have specialized on this issue. Most of the research and practical effort goes into the larger problem of the quality of life of the disabled, and this work is inevitably confounded by vagueness and disagreement about just what does constitute a reasonable quality of life. In this context, the aim of occupational disability studies is relatively unambiguous – either to get the person back to work or into work for the first time. By ‘work’ we mean contributing to the community in a more broad sense than the restricted concept of gainful employment, although this latter is an appropriate aim when it is feasible.

The activities of all the sections of society mentioned earlier would become more effective if we could progress and clarify the description of disabled persons. Governments in all countries are now spending very large sums of money on pensions and other support for particular groups of disabled. There has to be a borderline; on one side of it individuals are entitled to the benefit, on the other side they are not so entitled. Who defines that borderline? The legislators have to attempt to do so, but they are fallible because there is no established scientific background on which they can rely. For example, even on a specific issue like vision, it is by no means easy to define who is blind, who is partially sighted and who has more or less normal vision. It becomes really difficult if one has to start defining categories of mental illness. The legislator not only has to define his particular area of concern, but he also has to budget for the predicted expenditure. Thus, good law about, for example, invalidity pensions must be based not only on exact descriptions of who is eligible but also how many such people there are in regions and countries subject to the legislation. It is not surprising to find that in many countries the achievements of legislation

have been widely astray from the original objectives, which were formulated with integrity and good-will but without adequate support from statistical and scientific data and principles.

The decision makers, in relation to employing the disabled, have similar problems. They need to know what the handicap of an individual or group is, not in medical terminology which describes the aetiology or impairment, but in terms of what is implied in terms of restrictions of physical or mental activity in the context of the skills and experience of the disabled person. This is an impossible requirement, in that for most disabled people there are changes in handicap involving fluctuations and continuous trends for better or for worse. Nevertheless, some attempt must be made to meet the management requirement, which ideally would be a statement of a static percentage handicap. This would make it possible to fit the individual into orthodox production control and incentive payment systems.

The academic situation is similarly daunting. Expertise relevant to disability comes from many different disciplines, broadly all the biological and social sciences with other inputs from physical sciences, engineering and architecture. Consider, for example, the series of experts who deal with the progress of a disabled person during rehabilitation. The initial assessment is by clinicians, aimed at diagnosis and treatment from a medical point of view, with specialized support from anatomists and physiologists. When this phase is complete is a matter of current debate between those who say that the medical responsibility ends when the individual has been restored to as near normal as possible and a few who would like to see medical rehabilitation extended until the person has been fitted into an appropriate job. For those fortunate enough to work in organizations which have their own medical services there are two phases: curative medical care (broadly the National Health Service) followed by occupational medical care. At some stage the issue merges from a predominantly medical matter to a predominantly personnel matter, with rehabilitation specialists providing the bridge. Beyond this bridge is the province of the psychologist, who deals with matters such as occupational assessment and guidance and, after him, come other experts such as training officers and work designers including ergonomists and engineers concerned with the design of special equipment. Each of these specialists has his own scientific background which may have little in common with that of other specialists, not only on aspects of theory and techniques, but also on more basic matters such as values, objectives and criteria. For all the disciplines, occupational disability is a minor problem in terms of the number of specialists who have relevant interest and experience. Not many medical people know much about rehabilitation, not many psychologists know much about occupational guidance; the major theoretical and practical efforts in every discipline are orientated to other issues.

Thus there are the twin difficulties that not very much is known, and that



what is known is in disparate scientific and technical theories and in various languages.

The purpose of this book is to survey what is known, inevitably on a sampling rather than a comprehensive basis, and to make some preliminary attempt to bridge the gaps between disciplines, in the hope that some glimpses of an integrated approach might emerge.