by soft and loud auditory signals, to the reaction time to a light signal were studied by D. Carroll. The reactions were correlated with sympathetic vasoconstriction and vasodilatation in the forehead skin. The results are not too convincing and one wonders whether more positive findings would have been obtained from the reactive finger pulse.

Moderate physical exertion improved and severe physical exertion impaired performances in a mental task, leading C. P. Davey to conclude that the inverted U relationship depends on the level of arousal. C. J. Cooper considers the theoretical basis for the facilitation of mental function by moderate exercise as part of the neural pattern in the physiological arousal response. There are two contributions on heat as a stress by R. K. Macpherson and K. A. Provins and his colleagues. The importance of heat as a stressor in everyday life has perhaps been rather overplayed in the past. C. Cameron reviews work on fatigue and concentrates on the difficulties inherent to its definition and measurement; a satisfactory theory for fatigue is not yet available. D. Ferguson reports the results of a study of absenteeism and illness in relation to personality traits and working conditions in a large Australian concern. Usefully, but not surprisingly, the need for improved job selection procedures and re-organization of working conditions to increase job satisfaction emerge as important conclusions.

There are all too few objective tests which are capable of predicting an individual's liability to a breakdown at work. R. Welch's finding that Hettinger's vibrator equipment can identify individuals with a proneness to tenosynovitis is therefore welcome. Work found to be suitable for retardates compared with psychiatric cases in a rehabilitation workshop is considered by J. C. McEwen. The value of sleep patterns as an indicator of stress in everyday life and increased adrenocortical activity is considered by M. D. E. Goodyear, while M. W. Johns examines the role of psychosocial stress in the genesis of coronary heart disease. He rightly points out that because it is difficult to measure its importance it has almost certainly been underestimated compared with quantifiable factors such as diet, hypertension, male sex, and cigarette smoking. The final contribution by I. Pilowsky looks at psychiatric aspects of stress and examines the tendency for diseases to occur in 'clusters' which frequently follow a life change or series of life changes.

This reviewer always faces the task of reviewing a book derived from a symposium with a sinking heart and it usually proves well justified. This book has proved the exception and much credit clearly goes to the editor for hard spade work both before and after the meeting.

R. H. Fox

Occupational Health Problems of Young Workers. S. Forssman and G. H. Coppée. (Pp. 143; 10 Sw. Fr.) Geneva: ILO. 1974.

It has been said that considering the store of wisdom available in the world it is astonishing how little is used in the government of men. Certainly this is true of young people in the educational and industrial fields. There is wisdom in this book but rather heavily expressed and

indigestible. A lot of sifting is required, and there is repetition and even contradiction. It is clearly a condensation from many sources, and some indication of the authors' experience and background as well as a bibliography would be useful.

The book is subdivided into sections covering social, psychological, physiological, and sexual development; transition to industry, and the industrial physician. In effect, only large firms and their staff are considered. It is a pity that more attention is not paid to the implications of theory and the integration and coordination of school and work, and medical and social services for young people. The concept of the work of industrial physicians in relation to young people is clearly dependent upon improved team work and recognition of the indivisibility of education and medicine. Continuity of care is essential in the process of maturation of the young. The 'crisis of identity' takes place largely during the early years at work.

Some of the inadequacy of the book is shown in the historical section which gives much of little space to the United Kingdom. Here it is inferred that young children were barred from chimney sweeping because of occupational cancer, and it is inaccurate and superficial about developments in the vital fields of medical and educational supervision. It should be a matter of pride to the medical profession that the pioneer work of general practitioners acting as certifying factory surgeons did much to improve the lot of young people and stimulate the establishment of part-time education. Indeed they helped to establish universal primary education and registration of births, and finally, the school health service and the Factory Medical Department. They represented a general service not restricted to the larger firms, and among them were many pioneers of occupational health. The service finally died of neglect and denial of experiment.

Then as now the better firms did most to promote continuing education and assist maturation. Their work and this book underline how little we know about 'need' in relation to adolescents, and how inadequate it is to try and select special categories and ignore the rest.

More space could usefully have been given to the educational social and personal implications of earlier maturation and the difference between chronological and biological age. These factors have important implications for occupational health and industrial efficiency.

Regrettably this book did not come out before legislation was passed for reorganization of the Careers Service and the creation of the Employment Medical Advisory Service which abandoned care of young people except as specimens. Both services, so vital to occupational health, show a woeful lack of appreciation of the problems raised even in the foreword of this publication. Readers must surely feel unease at present developments in Great Britain.

M. E. M. HERFORD

Assessment of the Carcinogenicity and Mutagenicity of Chemicals. Report of a WHO Scientific Group. Technical Report Series 546. World Health Organization, Geneva, 1974. (Pp. 20; Sw. fr. 4). Geneva: WHO. 1974.