

Book reviews

STRESS AT WORK, C. L. Cooper and R. Payne (Eds), Wiley, Chichester and New York, 1978. Price: £9.75 (hardback).

This book is the first of the Wiley studies in occupational stress and will form a 'must' for workers in the field of stress at work. The book contains eleven chapters encompassing a wide field ranging from epidemiological contributions, the role of the family, personality, leading to the epistemology of the study of stress at work. Naturally, in an edited volume, the quality of the chapters vary and reviewing a broadly-based book carries the danger of inadequate coverage and lack of justice to individual chapters. In order to avoid this danger the four best chapters have been chosen for particular comment.

1. Stanislav V. Kasl: 'Epidemiological Contributions to the Study of Work Stress'.

This chapter poses a methodological challenge to anyone assuming that the work situation influences personality. He shows that epidemiological results should not be just presented as occupational differences in health, but should be analysed for self-selection or occupational socialization.

Later Kasl discusses definitional issues and criticizes much of current research as trivial because of its 'emphasis . . . on *perceived* demands, *perceived* capabilities, and *perceived* consequences if demands are not met' (p. 13). Because of this emphasis the independent and the dependent variables are, operationally, very similar. Kasl's attention then turns to coronary heart disease (CHD) and stress at work, in which there are conflicting results. In a short review of the 'Type A Coronary-Prone Behaviour Pattern' he accepts the research on the Type A personality as a psychological risk factor for CHD, but doubts its importance for analysing the work situation. He goes on to present the evidence for the association of work stress and indicators of well-being and mental health, and emphasizes the *small size* of the correlations in this type of research. Kasl emphasizes the need for longitudinal studies (particularly combined with 'natural experiments'), the necessity to look for objective indicators of the work environment, and the importance of the interaction of job and off the job roles. Kasl's general tendency is one of 'healthy scepticism' but we have the feeling that this scepticism is a little biased against the job socialization hypothesis, the effects of the work situation on stress effects, and for presenting contradictory results without trying to explain the contradictions. Some examples may suffice to justify this viewpoint: In discussing the connection between CHD and socio-economic status, he presents the contradictory results. But a further analysis may reveal that the methodologically stronger studies (e.g. the prospective studies) show a rather consistent higher CHD rate in the lower socio-economic classes as Schaefer & Blohmke (1977) have reported. It is necessary to do a critique on the contradicting studies in methodology as well as in content, and not just present the contradictions. It is not possible to do this extensively in a book chapter, but it needs to be done.

He presents some important methodological arguments that the correlations between the work situation and bad mental health could be exaggerated. But all the possible methodological arguments which might substantiate the view that the correlations are *underestimates* of the true association are not mentioned.

Two examples:

1. If predictors and criteria are unreliable—as is usual in the field—the true correlations will be higher. Statistical correction formulas might be useful in such a case.
2. The tendency of dissimulation, i.e. giving less evidence of ill health than there is existent, will be stronger in populations which have less knowledge of health risks and

less concern for health problems (e.g. blue collar workers). Such a tendency will weaken the correlations.

We feel that these and similar arguments should have been incorporated in an unbiased methodological critique.

2. Cary L. Cooper and Judi Marshall: 'Sources of Managerial and White Collar Stress'.

This is the most interesting article for the practitioner who wants to get an excellently structured survey of the literature on stress at work. The authors divide the article in seven parts: (1) 'Factors intrinsic to the job', in which predictors of CHD like repetitive work and work overload are presented; (2) 'Role in the organization', which discusses the problems involved in role ambiguity, role conflict, responsibility and the specific problems of the middle managers; (3) 'Relationship at work' which discusses the benevolent effects of social support; (4) In 'Career development' the problems of job security and status incongruity are discussed; (5) In 'Organizational structure and climate' the main thrust is on the stress-preventive effects of participation at work; (6) In 'Extra-organizational sources of stress' they discuss the impact of variables like marriage patterns and mobility; (7) In 'Characteristics of the individual' the authors show the predictive value of various psychometric measures and the Type A behaviour pattern of CHD. We feel most uncomfortable about the final section. We think that the authors have used some outdated terminology like 'some people are more characterologically predisposed to stress' (p. 97). In discussing problems of personality it would have been necessary to mention the considerable problems involved with measuring personality variables (Mischel, 1968), and it would have been useful to discuss the interactionistic personality theory (e.g. Endler and Magnusson, 1976; Magnusson and Endler, 1977).

Many of these comments also apply to the chapter by McMichael. It is not sufficient to present the situation on the one hand and personality on the other, but both have to be seen in an interactionistic framework, and the measures have to be appropriately anchored. One such approach might be the person-environment fit hypothesis, which Cooper and Marshall as well as McMichael refer to, but do not integrate into their presentation.

3. R. Van Harrison: 'Person-Environment Fit and Job Stress'.

Van Harrison has presented an excellent introduction to the 'Person-Environment fit' model of stress including a summary of his own work. We recommend this chapter as an up-to-date, precise and detailed presentation of the P-E fit model, carefully applying high methodological standards. But the main problems of the P-E fit research are still unsolved methodological shortcomings. One of the basic problems is mentioned by Kasl in his chapter '... the operationalization of concepts lags far behind the theoretical formulations, ...' (p. 33). Another fundamental problem is that descriptive results are open to speculative interpretation of possible causal relationships. The model explains strain as a result of discrepancies between person and environment and the intervening processes of coping and defence. Such a model has to be substantiated by experimental and longitudinal research analysing the postulated *processes* and not merely the overall *outcome*.

If a P-E misfit has come about because of environmental changes, the model hypothesizes coping and defence reactions, which lead to different levels of strain. This process is the most interesting prediction of the model, but it cannot be tested with correlation coefficients within a cross-sectional design. Through adaptation processes the P-E fit may be obtained again. Thus a strong correlation between P-E fit and strain is not always to be expected, because strain may be the chronic result of long lasting stress, while the P-E fit may have been regained in the meantime.

4. Roy Payne: 'Epistemology and the Study of Stress at Work'.

Roy Payne has written a stimulating and certainly provocative chapter. He refers to the philosophical book of Stephan Pepper (1942) and gives a summary of the essentials of this approach. Pepper's thesis is that the roots of knowledge are common-sense cognitions, which move from being 'rough' and 'uncriticized' to highly-refined evidence, applying scientific methods. In the history of science he finds four main approaches on 'world hypotheses' guiding theoretical thinking that can be regarded as relatively adequate: 'formism' (or regional), 'mechanism' (or naturalism), 'contextualism' (connected with pragmatism)

and 'organism' (or objective idealism). Every approach makes unique contributions to the development of knowledge, but has unique problems as well. The four world hypotheses should not be eclectically put together. Each should be pursued in its own right to increase the total stock of refined knowledge.

Payne applies Pepper's terminology, discussing methodological problems in stress research, e.g. different concepts of reliability and validity. He proposes the opinion that contextualism is the most relevant approach for social science at this time and offers conclusions relevant in stress research. A contextualistic point of view means that one has to look at the continuous change of patterns and structures in reality. It is possible that hypotheses are only true in one context, but not in another. You may try to apply hypotheses in a new context, but 'Beware, the situation may not be the same, so test it!' (p. 282). The contextual approach might be fruitful for research of stress at work in discovering relevant contextual variables, moderating the empirical relationships. We are sure Payne knows that his courageous enterprise leaves many questions open, e.g. the problem of truth criterion, the question if there are only four world hypotheses, etc.

Overall, we have put forth some critical questions in this review, *because* this is a stimulating and important book. We recommend it to everybody who is interested in this field.

REFERENCES

- Endler, N. S. and Magnusson, D. (Eds) (1976). *Interactional Psychology and Personality*, Hemisphere Publishing Corporation, Washington, D.C.
 Magnusson, D. and Endler, N. S. (1977). *Personality at the Cross-Roads: Current Issues in Interactional Psychology*, Erlbaum, Hillsdale, New York.
 Mischel, W. (1968). *Personality and Assessment*, Wiley, New York.
 Pepper, S. (1942). *World Hypotheses*, University of California Press, Berkeley.
 Schaefer, H. and Blohme, M. (1977). *Herzkrank durch psychosozialen Streß*, Hüthig, Heidelberg.

MICHAEL FRESE
University of Bremen
 and
 SIEGFRIED GREIF
Free University of Berlin

WHATEVER HAPPENED TO SHELL'S NEW PHILOSOPHY OF MANAGEMENT?
 F. F. M. Blackler and C. A. Brown, Gower Publishing Co. Limited, Farnborough,
 England. Price £9.50 (hardback).

This book arose out of a study of job redesign. Shell management convinced the authors that their job redesign projects were best seen against the context in which they arose—a new philosophy of management. The book describes the origins of the philosophy at the Tavistock Institute, the process of its adoption by Shell Refining Company Ltd, and critically examines the project viewed as applied social science. The authors draw on 44 interviews with Shell personnel, one with a member of the Tavistock Institute and other published accounts of the project.

The evidence gained from these interviews, which were set up to reconstruct events rather than sample opinions, surprised the authors. They conclude:

1. Despite the uncritical reports of its apparent success, the project never really 'took off' and in a number of important respects soon faded away.
2. Top management and their social science advisors had somewhat different aims and expectations for the exercise.

Copyright of Journal of Occupational Behavior is the property of Jossey-Bass, A Registered Trademark of Wiley Periodicals, Inc., A Wiley Company and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.