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### Stress of job relocation: Progress and prospect

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# Stress of job relocation: progress and prospect

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This article summarises research in the field of job relocation stress. It develops a model of the important factors underlying the process of job relocation and makes suggestions about future research.

*Key words:* Model of job relocation, personal factors, social factors, family factors, coping with relocation.

## 1. Introduction

As a result of rapid industrialization and the development of high technology, job relocation has become a common phenomenon in western societies. Based on the 1973-1977 US Annual Housing Surveys, it was estimated that about 800,000 household heads were relocated annually by their employers, which indicates that the rate of relocations has doubled since the early 1960s (Sell 1983). The Institute of Manpower Studies (IMS 1987) recently reported that every year in the UK, 250,000 employees move as a consequence of their work.

While undoubtedly 'job moves' involving geographical relocations are important life events and are likely to be stressful, surprisingly little research has been done on this topic. Although Brett (1980) has made an excellent effort to integrate the multidisciplinary research on the effects of job relocations, this review needs to be improved in two respects.

First as almost ten years have elapsed, updated findings in relevant areas demand further integration and interpretation. Second, influenced by the theoretical approach and information available at that time, Brett's review was confined to description and validation of the *problems* related to job relocations. Reflecting the current process orientated trend in stress research, recent investigations into job relocations have demonstrated substantial interest in the way potential factors such as familial and social issues have an impact within the context of job relocations. It is these promising trends in recent research that will receive extensive attention in this article.

Furthermore the relevant studies in the field are scattered widely in the management and psychological literature and a comprehensive

theoretical framework. In summary, the aims of this article are, first, to incorporate research on job relocation into the general discipline of stress research; second, to progress beyond feature analysis of job relocation, placing the primary emphasis on the effects of various moderating factors in the overall process; and finally, to propose suggestions for future research.

## 2. Features of job relocation— a general picture

Available studies show that job relocations are most likely to occur among the high SES occupations, but also appear to be frequent at all levels (Sell 1983). Job relocation has become a characteristic of managers' careers. In the most recent study conducted in UK companies (Munton 1988), 89% of the relocating employees were managers, and over one third of the sample had made four or more moves over the last ten years. A typical relocating employee is a middle-aged male manager, married with at least one child.

A more interesting issue related to discrepancies in the findings of recent studies and earlier ones. Public awareness of the potential disruptiveness of job relocations has increased over the last ten years. While people used to see job relocation as an opportunity for new job challenge and future career enhancement (Brett and Warbel 1978, Marshall and Cooper 1976), and were unwilling to turn down a transfer for the fear of jeopardizing their career (Brett and Warbel 1978, Glueck 1974), nowadays over 60% of the managers refuse a move at some time in their careers because of the potential disruption it may cause (IMS 1987). Moreover, studies in the

1970s revealed only minimal impact of job transfer on employees and their families (Glueck 1974, Brett and Warbel 1978, Checheris 1975), whilst managers in the 1980s tend to view their relocations as stressful, especially those with working wives (Munton 1988).

This discrepancy in the attitude towards moves, and the actual perception of the difficulty of moves, may be due to socio-economic changes, nevertheless it warrants a closer examination of the multiple issues involved in the process of job relocation.

Another discrepancy concerns familial and social issues. The early literature reported little effect of job relocations on the employee's family, and suggested an attitudinal consensus between employees and their spouses (see Brett 1980 for a review). However, in Munton's study (1988), the top five relocating stressors reported by 111 relocating families were all concerned with social and familial issues. Indeed, the two important factors found to account for the relocating stress were 'loss of social contacts' and 'problems associated with family property'. However, employees reported little stress associated with 'changes in the work environment'.

An American survey in high technology areas has also recognized geographical moves as a major stressor for both employees and their families (Anderson and Stark 1985). However, the authors pointed out that there has been little attention devoted to relocation problems beyond financial support.

Another line of research (Felmlee 1984), on the job mobility of working women, echoed Munton's findings placing an emphasis on familial factors and personal demographic backgrounds. Felmlee (1984) found that family constraints of being married and relating to husbands' income limited women's job mobility. Araji (1983) also found that presence of children at home positively affected occupational mobility, as did marriage stability. In examining sex differences in geographic mobility for occupational advancement, Markhan *et al.* (1983) noted that *lack* of family conflict over moving was one of the factors reducing variance explained by sex.

It seems that these discrepancies, and recent findings, suggest that the process of relocation must be considered as a family issue rather than one that concerns just the employee. This serves as a basis to incorporate both personal and familial factors into the study of job relocation.

Two general health problems have been shown to be associated with job relocation. First, mobile employees are prone to coronary heart disease. Syme *et al.* (1969) and Syme *et al.* (1965)

reported in two separate studies that urban, mobile, white-collar men had an incidence of coronary heart disease almost four times higher than their blue-collar and stable group, regardless of factors of heredity, obesity, smoking and physical activity. Research in a broader area of life events and illness (Holmes and Masuda 1974, House 1974, Rabkin and Streuning 1976) has also shown that men who experienced life events characterized by change, complexity and new environmental challenge, were more susceptible to coronary heart disease than men who experienced few such events. Unfortunately, this research did not address the contribution of another widely-recognized risk factor, namely Type A behaviour pattern.

Second, teenagers have more problems with moving than younger children, and mobile teenagers have less well-developed peer relationships than their stable contemporaries (Barrett and Noble 1973, Brett and Warbel 1978, Douvan and Adelson 1966). Although children generally do not seem to like moving, there is no evidence of a negative effect of moving on their mental health, relationship with parents or school achievement (Brett 1980).

Summarizing the available information, we can portray job relocation as follows. Job relocations resemble other commonly regarded stressful life events. They disrupt routines of daily life, and are accompanied by changes in social context. They provoke feelings of anxiety, uncertainty, loss of control and challenge. They activate various coping strategies to re-establish daily routines, and to manage these aversive feelings. They lead to either personal growth or illness.

### 3. Some important factors— understanding the process

Research in stress is perhaps one of the most diverse areas in psychology. Nowadays, most researchers will agree that stress arises from interactions between person and environment (cf. Cox 1987). Moreover, many moderating factors, such as personality characteristics and personal coping, exist and affect the processes of stress (Cooper and Payne 1988). Within this framework, there is evidence that organizational factors (such as job characteristics and organizational culture), familial factors (such as dual-career family and social dynamics within the family), and social factors (such as social network and social support) can affect the process of job relocation.

#### 3.1. Organizational factors

Nicholson's (1984) theory of work-role transitions proposes that the adjustment outcomes of

work-role transitions can be predicted from a knowledge of work-role characteristics, individual personality characteristics and prior occupational socialization. Nicholson (1984) argues from the basic premise that work-role transitions involve both personal change and role innovation. Combinations of two job characteristics (job discretion and novelty), and two personality characteristics (desire for control over, and desire for feedback from the external environment) determine four modes of adjustment. They are replication, absorption, determination and exploration.

West *et al.* (1987) incorporated personality, job characteristics and organizational culture into the process of work-role transitions in relation to transitions into newly created jobs. Their results generally supported Nicholson's (1984) predictions about how specific role requirements and personal characteristics influence transition outcomes. Findings further implied that 'proactive growth models of adjustment' are generally more applicable than 'reactive stress-coping models' to radical job changes.

Job characteristics such as role overload, role ambiguity and role conflict, which are typical of jobs to which employees have been recently transferred (Glueck 1974, Marshall and Cooper 1976) are associated with symptoms of poor mental and physical health (Beehr and Newman 1978, Cooper and Marshall 1976, House 1974). However, the relationship between job characteristics and the overall stressfulness of job relocations is complex. It may be surprising at first that job related aspects of the relocation made only a limited contribution to overall stressfulness in Munton's (1988) study, it becomes intelligible if we consider the following points.

First, stress is a personal phenomenon. Except in rare extreme situations, such as appalling natural disasters, most potential stressors give rise to vast individual differences in appraisal and perception determined in part by personal predisposition and previous experience. Therefore, in job relocation, work overload and role ambiguity *may* be taken as challenges by challenge-seeking people. Previous successful experience in job relocations or transfers can be incorporated to handle the new work environment smoothly. This suggests the importance of considering the employee's personal characteristics as well as active reactions. These perspectives will be elaborated later.

Second, job characteristic is a multidimensional variable. Karasek (1979) has identified two dimensions: quantity of work and degree of control or discretion that the person had over the work. He found that each dimension was independently related to indicators of strain, for

example, consumption of tranquilizers increased with increasing demand, but decreased as the discretion in the job increased. In other words, the types of manager who are typically relocated, may suffer from high demand but the ill effects can, to a certain extent, be offset by the high discretion that also goes with the job (Karasek 1979). Therefore, a closer look into the interaction between different dimensions of the job may further our understanding of the work-related aspect in the job relocation.

Another line of research, Van Maanen and Schein's (1979) theory, provides a taxonomy of six major dimensions of organizational socialization: collective vs. individual (boundary passage as one of a group or single), formal vs. informal (whether or not there is a set training or introduction programme), fixed vs. variable (whether passage follows as explicit socialization timetable), sequential vs. random (whether the process follows a cumulative sequence of identifiable steps), serial vs. disjunctive (whether the individual follows in the footsteps of the predecessors or role models) and investiture vs. divestiture (whether socialization builds on or strips away the person's prior skill and attributes). If the relocated job is a newly created one or one without clear definition, we would expect the relocated managers to be exposed to a pattern of individual, informal, random and disjunctive socialization. We would also expect these kind of jobs to be subject to variable socialization, that is, lacking in precise statements of boundary passage timetabling. Van Maanen and Schein (1979) argue that a variable socialization process, due to its unpredictability, is particularly likely to induce high levels of anxiety in employees.

Even if the relocated jobs are not new, due to the unfamiliar environment and work routine, newly relocated employees are likely to experience some difficulties in settling in and socializing with coworkers. Marshall and Cooper (1976) found that employees had a particularly difficult adjustment to a job transfer when there was no predecessor around to explain things. Marshall and Cooper (1976) and Schein (1971) also reported that managers found moves to company headquarters particularly difficult. In the job relocation context, the most important factors among these organizational variables might be support from within the organization. A supportive culture can act to alleviate stress (Payne 1980).

### 3.2. *Personal factors*

Viewing job relocation as a stressful life event, characterized by changes in both physical environment and daily routines, personality predispositions are likely to affect people's appraisal of and

reaction towards that event. Unfortunately, there are few studies in the literature which have examined both personality and job relocation. Therefore, the inclusion of personality factors in any model of job relocation can only be based on theoretical considerations.

It has been shown that life events like job relocation (Brett 1980), can be associated with coronary heart disease (CHD); Type A behavioural pattern (TABP) may exacerbate such effects. Despite the ambiguity and the long-lasting inconsistency in both the conceptualization and measurement of TABP, a recent quantitative review (Booth-Kewley and Friedman 1987) has verified that Type A has a moderate but reliable relationship with CHD.

Laboratory experiments shed some light on the possible mechanisms of TABP moderation of the effects of stress. Type As not only outperform Type Bs on effort exerted at the job (Jamal 1985), and seek greater degrees of challenge (Houston and Synder 1988), but also use high activation and expend more effort after negative feedback (Lulof *et al.* 1986), work harder under uncontrollable stress (Krantz 1974) and respond more reactively when confronted with non-contingent stimuli-response relations (Strube *et al.* 1986). Moreover, studies also show that Type As are more likely to attribute failure externally, although they exhibit greater deficits following exposure to an extended, salient uncontrollable stimulus (Strube and Boland 1986, Matthews 1982).

This line of empirical evidence may suggest a mechanism involving Type As' excessive need for control and achievement. Type As possess a heightened concern for mastery or control of their physical and social environment, and are never satisfied with their current achievement, but have a high level of self-esteem.

Job relocation seems an ideal situation to elicit typical Type A behaviour. Disruption in daily routine, demands of the new job, and dramatic changes in the environment all challenge the person's resources and command their action. A typical Type A person would, therefore, demonstrate challenge-seeking and striving for control qualities, expending great effort to master stress. If, however, the stressors involved in the job relocation are not amenable to change and intervention, Type As will realize that they are losing control of the situation, and their feelings of distress will increase. This, in turn, may lead to poor adaptation and even risk of illness, such as the CHD.

West *et al.*'s study (1987) on transitions to newly created jobs is the only one which has addressed personality factors, although these transitions do not necessarily involve geographic

relocations. The important thing is that West *et al.* (1987) found that 'desire for control' over the environment, as a personality factor, predicted adjustment outcomes.

No doubt, the best developed and much studied construct of control is Rotter's (1966) internal versus external locus of control. An internal locus of control refers to the conviction that events are contingent upon one's own behaviour. People who have internal locus of control also have a higher desire for control over their environment. An external locus of control, on the other hand, refers to the conviction that events are not contingent upon one's actions, but upon luck, chance, fate, or powerful others. It is arguable that undesirable life events will be more threatening to, and hence exert more negative impact, on people who perceive themselves as having little control over such events (Lefcourt 1976).

Rotter (1966, 1975) conceived of generalized control expectancies as having their greatest influence when a situation is ambiguous or novel. Undoubtedly, a typical example of such a situation is job relocation. Under ambiguity, a generalized belief about control would be translated into an appraisal of controllability with respect to the specific situation. Thus, a person who has internal locus of control might appraise the situation as controllable, whereas a person with external locus of control might appraise it as uncontrollable. An appraisal of uncontrollability might be generalized to enhance a feeling of the 'meaninglessness of life', which can be a precursor of emotional distress.

Internal locus of control is not only associated with exertion and persistence (Lefcourt 1976), but also related to the type of coping activities adopted. People with internal locus of control usually engage more in active, problem-focused coping modes, which are more effective. Furthermore, Lefcourt *et al.* (1984) found that internals derive greater benefits from social support than externals.

Therefore, facing an ambiguous and uncertain situation as a job relocation, people who have internal locus of control may perceive the situation positively, sustaining their sense of control over the environment. Meanwhile, they will engage in active, instrumental, problem orientated activities, as well as making the best use of the available social networks. Not surprisingly, these people will achieve better adaptation after job relocation.

The last individual difference that we will discuss is the 'hardy personality' (Kobasa 1979). The key attribute—hardiness—is defined as a personality style that expresses commitment, control and challenge. Kobasa (1979) suggests

that hardiness leads to a particular type of coping: 'keeping specific stressors in perspective'. Hardy individuals' basic sense of purpose in life allows them to ground events in an understandable and varied life plan. Knowing that one has the resources with which to respond to stressors, hardy individuals' underlying sense of control allows them to develop a well-exercised coping repertoire seeing situations as potential opportunities for change.

It is obvious that facing as important a life change as job relocation, people who have a stronger commitment to self, a positive attitude towards the environment, and a sense of meaningfulness will remain healthy. It is also interesting that the theory of hardiness was originally developed among middle- and senior managers (c.g., Kobasa *et al.* 1982), and these people are the most likely to be relocated.

In conclusion, although there is little direct empirical evidence that can be drawn upon, the theoretical relevance of TABP, locus of control and hardiness to job relocations is straightforward. In a process marked by change and uncertainty, a sense of control over the environment is essential to maintain psychological well-being. However, the sense of control in relation to TABP is excessive and unrealistic, and can lead to potential risk of illness. In contrast, sense of control in relation to an 'internal locus of control' and 'hardiness' is reasonable and balanced, and can lead to successful adjustment.

### 3.3. *Familial factors*

As a stressful life event, job relocation is a family issue rather than one that concerns the employee only. Job relocation can be hazardous to family life in many ways. Geographic relocation necessarily involves the family in 'property trading', and this appeared as a major stress in Munton's (1988) study. Sometimes job relocation causes temporary or long-term separation, which can be a crisis point in a marriage (Marshall and Cooper 1976). Continuing children's schooling can also be problematic. Moreover, if the family is a dual-earner or dual-career one, conflict over the spouse's work can be acute, especially in today's tight labour market. It is not difficult to see how job relocation can compel the entire family into a struggle to re-establish its daily routine. Therefore, not surprisingly, overcoming these family problems can contribute significantly to the final adaptation.

Despite this, job relocation can open an opportunity to strengthen the family relationship, and may invite personal growth. As a coherent unit, family members engage in decision-making, providing information, sharing difficulties, and offering support to each other

in order to achieve a common goal. Whilst disruption of their routine may be stressful, it may also break monotony and lead to a new era in family life. In other words, the family as a functioning whole will undoubtedly play an important part in the job relocation. In fact, the adjustment of each family member, and the social dynamics within the family, will influence the relocation experience and adjustment to it.

### 3.4. *Social factors*

In life stress research, a support system may be described as the formal or informal relationships through which a person receives emotional, cognitive and material support in coping with stress. Social support is generally regarded as an important moderating factor in the stress experience. Cobb (1976) has cited sufficient evidence to support his assertion from a variety of life areas, including pregnancy and birth, transition to adulthood, hospitalization and recovery from illness, employment termination and retirement. Wells (1977) has examined the conditioning effects of perceived social support on the relationship between perceived work stress and health. His results showed that socio-emotional support from wives and supervisors was much more effective in mitigating the effects of perceived stress on health than that from co-workers, friends or relatives.

Due to the particular nature of job relocation, the possible disruption and re-establishment of social networks are important factors in adaptation. Geographical relocations imply loss of social contacts and the establishment of new social networks. Job changes also require sufficient support, within the organization, from supervisors, colleagues and subordinates. Since job relocations affect families as well as employees, it is very much a shared experience and hence demands support by the family for each other to achieve satisfactory adaptation.

Apart from sources and amount of social support, the timing and types of support provided are also important. Since people's needs change during the process of relocation, providing the right support at the right time is critical (Cooper *et al.* 1988).

## 4. **Future research—a multifactorial model**

To conclude this review, we propose a multifactorial model to account for the stress of job relocation. The diagram presented in figure 1 is intended to incorporate job relocation into the general scope of stress research, and to articulate the role of the various factors discussed earlier. It can be described as follows:

- When a decision of job relocation is made, or more likely the case, accepted by an

employee, he or she is exposed to enormous problems and difficulties. However, only when the problem presents a potential threat does the stress process begin.

- The judgement of threat is affected by organizational, social, personal and familial factors. The stressfulness of a job relocation depends not only on the individual and the organization, but also on the individual's social and family backgrounds.
- Knowledge of threat results in a state of stress, and the person must act, or cope to restore a balance within his or her environment.
- The process of coping can also be influenced by a variety of factors. The previous personal experience of coping, individual

differences, such as TABP, locus of control and hardiness, as well as the support system available to him or her, including organization, family and friends.

- If the coping is successful, the person can overcome the problem and gain personal growth from the experience.
- If the coping is not successful, for instance, his or her family conflict escalates, or his or her work performance deteriorates, then, he or she is likely to suffer the long term effects of stress, and is 'at risk' of both mental and physical illness.

The study on job relocation has both theoretical and practical importance. Future research should be encouraged along the various lines indicated in this paper. Existing studies are typically descriptive and asystematic, and nearly all of them are retrospective. An ideal study needs

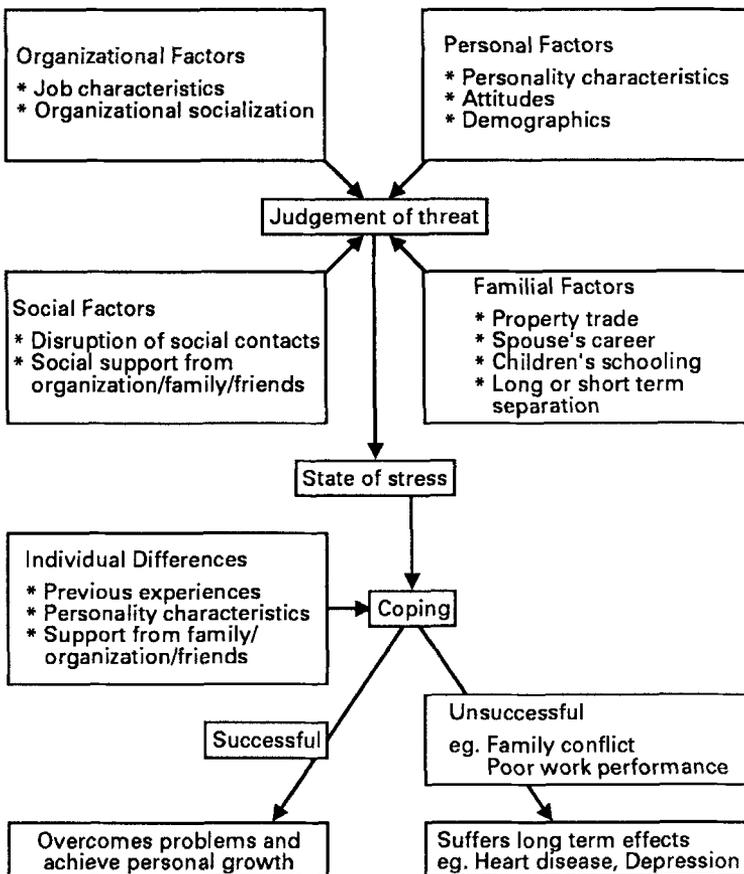


Figure 1.

to recruit a large representative sample and use a longitudinal design with prospective analysis. Furthermore, previous studies have tended to be problem orientated, and analyses typically focus on an isolated aspect of the relocation process. Not a single study has taken account of the interaction of multiple factors. In order to achieve a better understanding of the disruptive effects of the job relocation, a multifactorial approach should be adopted.

### References

- ANDERSON, C. and STARK, C. 1985, Emerging issues from job relocations in high tech field: Implication for Employee Assistance Programs, *Employee Assistance Quarterly*, **1**, 37–54.
- ARAJI, S. K. 1983, Married white women: occupational mobility and earnings of part-time vs. full-time workers, *Humboldt Journal of Social Relations*, **10**, 61–89.
- BARRETT, C. L. and NOBLE, H. 1973, Mothers' anxiety versus the effects of long distance move in children, *Journal of Marriage and the Family*, **35**, 181–188.
- BEHR, T. A. and NEWMAN, J. E. 1978, Job stress, employee health and organizational effectiveness: a facet analysis, model and literature review, *Personnel Psychology*, **31**, 665–700.
- BOOTH-KEWLEY, S. and FRIEDMAN, H. S. 1987, Psychological predictors of heart disease: a quantitative review, *Psychological Bulletin*, **101**, 343–362.
- BRETT, J. M. 1980, The effect of job transfer on employees and their families. In C. L. Cooper and R. Payne (eds) *Current Concerns in Occupational Stress* (Wiley, New York).
- BRETT, J. M. and WARBEL, J. D. 1978, The effect of job transfer on employees and their families: Baseline Survey Report. Washington, DC. Employee Relocation Council.
- CHECHERIS, E. 1975, Relocation study. Unpublished manuscript, University of Minnesota.
- COBB, S. 1976, Social support as a moderator of life stress, *Psychosomatic Medicine*, **38**, 300–314.
- COOPER, C. L. 1983, *Executive Families under Stress* (Prentice Hall, New Jersey).
- COOPER, C. L. and MARSHALL, L. 1976, Occupational sources of stress, heart disease and mental ill health, *Journal of Occupational Psychology*, **49**, 11–29.
- COOPER, C. L. and PAYNE, R. 1988, *Causes, Coping and Consequences of Stress at Work* (Wiley, New York).
- COOPER, C. L., COOPER, R. D., and EAKER, L. 1988, *Living with Stress* (Penguin Books, London).
- COX, T. 1987, Stress, coping and problem solving, *Work & Stress*, **1**, 5–14.
- DOUVAN, E. and ADELSON, J. 1966, *The Adolescent Experience* (Wiley, New York).
- FELMLEE, D. H. 1984, The dynamics of women's job mobility, *Work and Occupations*, **11**, 259–281.
- GLUECK, W. F. 1974, Managers, mobility and morale, *Business Horizons*, **17**, 65–70.
- HOLMES, T. and MASUDA, M. 1974, Life change and illness susceptibility. In B. S. Dohrenwend and B. P. Dohrenwend (eds) *Stressful Life Events* (Wiley, New York).
- HOUSE, J. S. 1974, Occupational stress and coronary disease: a review and theoretical integration, *Journal of Health and Social Behaviour*, **15**, 12–27.
- HOUSTON, B. K. and SYNDER, C. R. 1988, *Type A Behavior Pattern* (Wiley, New York).
- HUBERMAN, A. M. 1985, Educational change and career pursuits: some findings from the field, *Interchange*, **16**, 54–73.
- (IMS) INSTITUTE OF MANPOWER STUDIES 1987, Relocating managers and professional staff, *Report 139* (IMS, Sussex University).
- JAMAL, M. 1985, Type A behaviour and job performance: some suggestive findings, *Journal of Human Stress*, **11**, 66–68.
- KARASEK, R. A. 1979, Job demands, job decision latitude and mental strain: implications for job redesign, *Administrative Science Quarterly*, **24**, 285–306.
- KOBASA, S. C. 1979, Stressful life events, personality and health: an inquiry into hardiness, *Journal of Personality and Social Psychology*, **37**, 1–11.
- KOBASA, S. C., MADDI, S. R. and KAHN, S. 1982, Hardiness and health: a prospective study, *Journal of Personality and Social Psychology*, **42**, 168–177.
- KRANTZ, D. S. 1974, Helplessness, stress level and the coronary-prone behaviour pattern, *Journal of Experimental Social Psychology*, **10**, 284–300.
- LEFCOURT, H. M. 1976, *Locus of Control: Current Trends in Theory and Research* (Halstead, New York).
- LEFCOURT, H. M., MARTIN, R. A. and SALEH, W. E. 1984, Locus of control and social support: interactive moderators of stress, *Journal of Personality and Social Psychology*, **47**, 378–389.
- LULOFS, R., VAN DIEST, R. and VAN DER MOLEN, G. M. 1986, Differential reactions of Type A and Type B males to negative feedback about performance, *Journal of Psychosomatic Research*, **30**, 35–40.
- MARKHAM, W. T., MACKEN, P. O., BONJEAN, C. M. and CORDER, J. 1983, A note on sex, geographic mobility and career advancement, *Social Forces*, **61**, 1138–1146.
- MARSHALL, L. and COOPER, C. L. 1976, The mobile manager and his wife, *Management Decision*, **14**, 179–225.
- MATTHEWS, K. A. 1982, Psychological perspectives on the Type A behaviour pattern, *Psychological Bulletin*, **91**, 293–323.
- MUNTON, A. G. 1988, Families on the move: job relocation and stress. Paper presented at BPS London Conference.
- NICHOLSON, N. 1984, A theory of work-role transitions, *Administrative Science Quarterly*, **29**, 172–191.
- PAYNE, R. 1980, Organizational stress and social support. In C. L. Cooper and R. Payne (eds) *Current Concerns in Occupational Stress* (Wiley, New York).
- RABKIN, J. G. and STREUNING, E. L. 1976, Life events, stress and illness, *Science*, **194**, 1013–1020.
- ROTTER, J. B. 1966, Generalized expectancies for internal versus external control of reinforcement, *Psychological Monographs: General and Applied*, **80** (whole No. 609).

- ROTTER, J. B. 1975, Some problems and misconceptions related to the construct of internal versus external control of reinforcement, *Journal of Consulting and Clinical Psychology*, **43**, 56–67.
- SCHEIN, E. H. 1971, The individual, the organization, and the career: a conceptual scheme, *Journal of Applied Behaviour Science*, **7**, 401–427.
- SELL, R. R. 1983, Transferred jobs: a neglected aspect of migration and occupational change, *Work and Occupations*, **10**, 179–206.
- STRUBE, M. J. and BOLAND, S. M. 1986, Postperformance attributions and task persistence among Type A and B individuals: a clarification, *Journal of Personality and Social Psychology*, **50**, 413–420.
- STRUBE, M. J., BERRY, J. M., LOTT, C. L., FOGELMAN, R., STEINHART, G., MOERGEN, S. and DAVISON, L. 1986, Self-schematic representation of the Type A and Type B behaviour pattern, *Journal of Personality and Social Psychology*, **51**, 170–180.
- SYME, S. L., BORHAM, N. O. and BUECHLEY, R. W. 1969, Cultural mobility and coronary heart disease in an urban area, *American Journal of Epidemiology*, **82**, 234–246.
- SYME, S. L., HYMAN, M. M. and ENTERLINE, P. E. 1965, Cultural mobility and the occurrence of coronary heart disease, *Journal of Health and Human Behaviour*, **6**, 178–189.
- WELLS, R. S. 1977, Differences in sources of social support in conditioning the effect of perceived stress on health. Paper presented to 1977 Annual Meeting of Southern Sociological Association Atlanta, GA, USA.
- WEST, M. A., NICHOLSON, N. and REES, A. 1987, Transitions into newly created jobs, *Journal of Occupational Psychology*, **60**, 97–113.
- VAN MAANEN, J. and SCHEIN, E. H. 1979, Towards a theory of organizational socialization. In B. M. Staw (ed.) *Research in Organizational Behavior* Vol. 1. (JAI Press, Greenwich, CT).

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