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AN INTERVENTION STRATEGY FOR WORKPLACE STRESS

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Abstract—This article explores a range of sources of workplace stress and a three-prong intervention strategy for managing pressures at work. The three approaches highlighted are primary, secondary, and tertiary prevention interventions. Primary is concerned with stressor reduction, secondary with stress management and tertiary with remedial support. In addition, a number of wider policy issues are suggested, such as risk assessment, economic incentives, and specific measures to help small- and medium-sized workplaces in managing workplace stress. © 1997 Elsevier Science Inc.

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INTRODUCTION

Any organization that seeks to establish and maintain the best state of physical, mental, and social well-being of its employees needs to have policies and procedures that comprehensively address health and safety. These policies will include procedures to manage stress, based on the needs of the organizations and its members, and will be regularly reviewed and evaluated.

TYPES AND LEVELS OF INTERVENTION

There are a number of options to consider in looking at the prevention of stress, which are termed *primary* (e.g., stressor reduction), *secondary* (e.g., stress management), and *tertiary* (e.g., employee assistance programs/workplace counseling) levels of prevention, and address different stages in the stress process [1].

Primary prevention is concerned with taking action to modify or eliminate *sources* of stress inherent in the work environment and thus reduce their negative impact on the individual. The "interactionist" approach to stress [2, 3] depicts stress as the consequences of the "lack of fit" between the needs and demands of the individual and his/her environment. The focus of primary interventions is in adapting the environment to "fit" the individual.

Elkin and Rosch [4] summarize a useful range of possible strategies to reduce workplace stressors:

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- Redesign the task.
- Redesign the work environment.
- Establish flexible work schedules.
- Encourage participative management.
- Include the employee in career development.
- Analyze work roles and establish goals.
- Provide social support and feedback.
- Build cohesive teams.
- Establish fair employment policies.
- Share the rewards.

A number of general recommendations for reducing job stress have been put forward in a report by the U.S. government's National Institute for Occupational Safety and Health in the National Strategy for the Prevention of Work Related Psychological Disorders [5]. A few of these recommendations include:

> *Work load and work pace.* Demands (both physical and mental) should be commensurate with the capabilities and resources of workers, avoiding underload as well as overload. Provisions should be made to allow recovery from demanding tasks or for increased control by workers over characteristics such as work pace of demanding tasks.
> *Work schedule.* Work schedules should be compatible with demands and responsibilities outside the job. Recent trends toward flexitime, a compressed work week, and job sharing are examples of positive steps in this direction. When schedules involve rotating shifts, the rate of rotation should be stable and predictable.
> *Job future.* Ambiguity should be avoided in opportunities for promotion and career or skill development, and in matters pertaining to job security. Employees should be clearly informed of imminent organizational developments that may affect their employment.
> *Social environment.* Jobs should provide opportunities for personal interaction, both for purposes of emotional support and for actual help as needed in accomplishing assigned tasks.
> *Job content.* Job tasks should be designed to have meaning and provide stimulation, and an opportunity to use skills. Job rotation or increasing the scope (enlargement/enrichment) of work activities are ways to improve narrow, fragmented work activities that fail to meet these criteria.

Primary intervention strategies are often a vehicle for culture change. Obviously, as the type of action required by an organization will vary according to the kinds of stressors operating, any intervention needs to be guided by some prior diagnosis or stress audit or risk assessment to identify the organizational-, site-, or departmental-specific stressors responsible for employee stress.

Secondary prevention is essentially concerned with the prompt detection and management of experienced stress by increasing awareness and improving the stress management skills of the individual through training and educational activities. Individual factors can alter or modify the way employees exposed to workplace stressors perceive and react to this environment. Each individual has their own personal

stress threshold, which is why some people thrive in a certain setting and others suffer. This threshold will vary between individuals and across different situations and life stages. Some key factors or "moderator" variables that influence an individual's vulnerability to stress include their personality, their coping strategies, age, gender, attitudes, training, past experiences, and the degree of social support available from family, friends, and work colleagues.

Secondary prevention can focus on developing self-awareness and providing individuals with a number of basic relaxation techniques. Health promotion activities and lifestyle modification programs also fall into the category of secondary level interventions.

Stress education and stress management training serve a useful function in helping individuals to recognize the symptoms of stress, and to overcome much of the negativity and stigma still associated with the stress label. Awareness activities and skills training programs designed to improve relaxation techniques, cognitive coping skills, and work/lifestyle modification skills (e.g., time management courses or assertiveness training) have an important part to play in extending the individual's physical and psychological resources. They are particularly useful in helping individuals deal with stressors inherent in the work environment that cannot be changed and have to be "lived with" like, for example, job insecurity. Such training can also prove helpful to individuals in dealing with stress in other aspects of their life, that is, non–work related. However, the role of secondary prevention is essentially one of *damage limitation*, often addressing the *consequences* rather than the *sources* of stress which may be inherent in the organization's structure or culture. They are concerned with improving the "adaptability" of the individual to the environment. Consequently, this type of intervention is often described as "the band aid" or inoculation approach, because it is implicitly assumes that the organization will not change but continue to be stressful, therefore, the individual has to develop and strengthen his/her resistance to that stress.

Tertiary prevention is concerned with the treatment, rehabilitation, and recovery process of those individuals who have suffered or are suffering from serious ill health as a result of stress. Interventions at the tertiary level typically involve the provision of counseling services for employee problems in the work or personal domain. Such services are either provided by in-house counselors or outside agencies in the form of an employee assistance program (EAP). EAPs provide counseling, information and/or referral to appropriate counseling treatment and support services. Originally introduced in the U.S. to tackle alcohol-related problems, the concept of workplace counseling has since assumed a significantly wider focus. Such services are confidential and usually provide a 24-hour telephone contact line. Employees are able to voluntarily access these services or in some cases are referred by their occupational health function. The implementation of comprehensive systems and procedures to facilitate and monitor the rehabilitation and return to work of employees who have suffered a stress-related illness is another aspect of tertiary prevention.

There is evidence to suggest that counseling is effective in improving the psychological well-being of employees and has considerable cost benefits. Based on reports published in the U.S., figures typically show savings to investment rates of anywhere from 3:1 to 15:1 [6]. Such reports have not been without criticism, particularly as

schemes are increasingly being evaluated by the "managed care" companies responsible for their implementation and who frequently are under contract to deliver a preset dollar saving [7]. However, evidence from established counseling programs which have been rigorously evaluated, such as those introduced by Kennecott in the U.S. and the U.K. Post Office, resulted in a reduction in absenteeism in one year of approximately 60%. In the case of the U.K. experience [8], measures taken pre- and postcounseling showed significant improvements in the mental health and self-esteem of the participating employees. However, there was no improvement in levels of employee job satisfaction and organizational commitment. Similarities were found in a recent national evaluation of employee assistance programs in a variety of U.K. companies [9].

Like stress management programs, counseling services can be particularly effective in helping employees deal with workplace stressors that cannot be changed and non–work-related stress (i.e., bereavement, marital breakdown, etc.), but which nevertheless tend to spill over into work life.

A COMPARISON OF INTERVENTIONS

Whereas there is considerable activity at the secondary and tertiary level, primary or organizational level (stressor reduction) strategies are comparatively rare [10, 11]. This is particularly the case in the U.S. and the U.K. Organizations tend to prefer to introduce secondary and tertiary level interventions for several reasons:

(i) There is relatively more published data available on the cost benefit analysis of such programs, particularly EAPs [12].
(ii) Those traditionally responsible for initiating interventions, that is, the counselors, physicians, and clinicians responsible for health care, feel more comfortable with changing individuals than changing organizations [13].
(iii) It is considered easier and less disruptive to business to change the individual than to embark on any extensive and potentially expensive organizational development program—the outcome of which may be uncertain [6].
(iv) They present a high profile means by which organizations can "be seen to be doing something about stress" and taking reasonable precautions to safeguard employee health.

Overall, evidence as to the success of interventions which focus at the individual level in isolation suggests that such interventions can make a difference in temporarily reducing experienced stress [1]. Generally, evidence as to the success of stress management training is confusing and imprecise [4], which possibly reflects the idiosyncratic nature of the form and content of this kind of training. Some recent studies that have evaluated the outcome of stress management training have found a modest improvement in self-reported symptoms and psychological indices of strain [14, 15], but little or no change in job satisfaction, work stress, or blood pressure. Participants in a company-wide program, for example, reported improvements in health in the short term (i.e., 3 months postintervention), but little was known about its long-term effect [16]. Similarly, as discussed, counseling appears to be successful in treating and rehabilitating employees suffering from stress, but as they are likely to

re-enter the same work environment as dissatisfied in their job and no more committed to the organization than they were before, potential productivity gains may not be maximized. Firth-Cozens and Hardy [17] have suggested that, as symptom levels reduce as a result of clinical treatment for stress, job perceptions are likely to become more positive. However, such changes are likely to be short term if employees return to an unchanged work environment and its indigenous stressors. If, as has been discussed, such initiatives have little impact on improving job satisfaction, then it is more likely that the individual will adopt a way of coping with stress which may have positive individual outcomes, but may have negative implications for the organization (i.e., taking alternative employment).

The evidence concerning the impact of health promotion activities has reached similar conclusions. Research findings which have examined the impact of lifestyle changes and health habits provide support that any benefits may not necessarily be sustained. Lifestyle and health promotion activities appear to be effective in reducing anxiety, depression, and psychosomatic distress, but do not necessarily moderate the stressor–strain linkage. According to Ivancevich and Matteson [18], after a few years 70% of individuals who attend such programs revert to their previous lifestyle habits.

Furthermore, as most stress management programs or lifestyle change initiatives are voluntary, this raises the issue as to the characteristics and health status of those participants who elect to participate. According to Sutherland and Cooper [19], participants tend to be the "worried well" rather than the extremely distressed. Consequently, those employees who need most help and are coping badly are not reached by these initiatives. In addition, access to such programs is usually restricted to managers and relatively senior personnel within the organization. Given that smoking, alcohol abuse, obesity, and coronary heart disease are more prevalent among the lower socioeconomic groups, and that members of these groups are likely to occupy positions within the organizational structure which they perceive afford them little or no opportunity to change or modify the stressors inherent in their working environment, the potential health of arguably the "most at risk" individuals are not addressed. Finally, the introduction of such programs in isolation may serve to enhance employee perceptions of the organization as a caring employer—interested in their health and well-being—and so may contribute to create a "feel good" factor which is unlikely to be sustained if the work environment continues to remain stressful.

Secondary and tertiary level interventions have a useful role to play in stress prevention but as "stand alone" initiatives, they are not the complete answer unless attempts are also made to address the sources of stress itself [20]. Cardiovascular fitness programs may be successful in reducing the harmful effects of stress on the high-pressured executive, but such programs will not eliminate the stressor itself, which may be over promotion or a poor relationship with his/her boss [6]. Identifying and recognizing the problem and taking steps to tackle it, perhaps by negotiation (i.e., a "front end" approach), might arguably arrest the whole process. If, as has been discussed, experienced stress is related to the individual's appraisal of an event or situation, an organization can reduce stress by altering the objective situation (e.g., by job redesign).

A further limitation of secondary and tertiary level interventions is that they do

not directly address the important issue of control. This is particularly critical in terms of the health of blue-collar workers. Research has shown [21] that jobs which place high demands on the individual, but at the same time afford the individual little control or discretion (referred to as "decision latitude"), are inherently stressful. Stress management training may heighten the awareness of workers to environmental stressors which may be affecting their health, but because as individuals they may lack the "resource" or "positional" power to change them, they may arguably even exacerbate the problem.

Again, there is not a great deal of research evidence which has evaluated the impact of primary level interventions on employee health and well-being. However, what exists has been consistently positive, particularly in showing the long-term beneficial effects [11, 22, 23].

Treatment may, often therefore, be easier than prevention, but it may only be an effective short-term strategy. In focusing at the outcome or "rear end" of the stress process (i.e., poor mental and physical health) and taking remedial action to redress that situation, the approach is essentially reactive and recuperative rather than proactive and preventative.

In summary, secondary and tertiary levels of intervention are likely to be insufficient in maintaining employee health without the complementary approach of primary/stressor reduction initiatives. Secondary and tertiary level interventions may extend the physical and psychological resources of the individual, particularly in relation to stressors which cannot be changed, but those resources are ultimately finite. Tertiary level interventions, such as the provision of counseling services, are likely to be particularly effective in dealing with non–work-related stress. Evidence from workplace counseling programs [8] indicates that approximately a quarter of all problems presented concerned relationships outside of work. Organizations considering counseling schemes should recognize that counseling is a highly skilled business and requires extensive training. It is important to ensure that counselors have recognized counseling skills training and have access to a suitable environment which allows them to conduct this activity in an ethical and confidential manner [12].

THE WIDER IMPLICATIONS OF CREATING HEALTHY WORK ORGANIZATIONS

The previous sections have emphasized the importance and potential cost benefits to the organization of introducing initiatives to reduce stress and promote employee health and well-being in the workplace. Action to reduce stress at work is usually prompted by some organizational problem or crisis, for example, escalating rates of sickness absence or labor turnover. Consequently, actions tend to be driven by a desire to reduce or arrest costs (i.e., problem-driven–negative motives) rather than the desire to maximize potential and improve competitive edge (i.e., gains-driven–positive motives). The danger of this type of approach is that once sickness absence or labor turnover rates stabilize at an acceptable level, interventions may lose their impetus and be considered no longer necessary. It has to be recognized that stress is dynamic and, in a rapidly changing environment, is unlikely to ever disappear completely, but needs to be regularly monitored and addressed. Organizations need to consider stress prevention not only as a means of cost reduction or containment but also as a means of maintaining and improving organizational health and increas-

ing productivity. The costs of stress and the collective health and wealth of organizations and their workers is of great importance to society as a whole. Occupational stress is not just an organizational problem but a wider societal problem which is ultimately shared by U.K. Plc and by all members of the EU, both directly and indirectly, through increased taxation and state health insurance contributions or diminished living standards as a result of loss of competitive edge. This final section is therefore concerned with the extent to which consolidated action and policies at U.K. and EU levels can address the problem of stress at work. It considers ways in which policymakers can encourage and provide information and incentives to responsible organizations to instigate and maintain stress intervention strategies.

1. Risk assessment

Legislative differences in health and safety matters within individual member states of the EU would seem to influence practices, interpretation, and employer attitudes. The framework Directive on Health and Safety (89/391) embodies the concept of risk assessment which makes it mandatory for organizations within the 15 member states to assess the health and safety risks to its workers. In terms of employer obligations, the important points of this Directive are:

- the provision of protective, preventive and emergency services;
- comprehensive information in the area of health and safety; and
- full consultation and participation rights to workers on matters affecting workplace health and safety.

Stress represents an occupational risk to health. The assessment of psychosocial factors relating to health is substantially different from assessing physical hazard in the working environment, which has been the traditional domain of the Labour and Factory Inspectorate and those responsible for health and safety within an organization. Concerns have been expressed [24] as to the shortage of sufficiently trained personnel and the adequate provision of training in many countries to undertake the traditional tasks of occupational health and safety. Not surprisingly, there is likely to be an even greater skills and training deficiency in the area of psychosocial factors pertaining to health.

Therefore, to provide appropriate guidance and increase organizational awareness of these factors, investment is needed to provide comprehensive, professional and universal training for existing labor and factory inspectors. Alternatively, there should be a move toward more interdisciplinary teams which include an expert trained in this field. This training should also be extended to managers and employee representatives within companies. By introducing regular risk assessments in this area, this would help organizations understand and monitor factors that may negatively affect employee health and psychological well being. Health and safety authorities in the U.K. and EU member states have a major role to play in either conducting risk assessments themselves or providing appropriate advice and support to organizations to enable them to perform their own assessment.

2. Economic incentives

Typically, organizations respond to statutory legislation by implementing the minimum requirements to conform with the law. Rather than merely punishing "bad practice," the more effective way of encouraging "good practice" is to reward

it. This could take the form of providing tax incentives for validated health and safety expenditure incurred by organizations as discussed in the recent European Foundation publication [25].

Another option is to more directly link risk assessment and stress prevention strategies to insurance premiums. Currently, the cost of employee accidents and compensation for injuries and illness and negligence across Europe is met by a variety of insurance bodies in both the public and private sector. Insurance premiums may be levied as a flat rate or vary according to the claims experience of the industry sector or the individual organization. When premiums are linked to the claims experience or past accident history of the individual organization, employers become more aware of the true cost of their actions. If an employer is penalized by an increased premium as a result of a high accident rate, they are likely to take steps to address and improve the situation. However, there are drawbacks to such arrangements. For example, employers may put pressure on employees not to pursue claims or report accidents. Claims experience data-based costs can give a distorted picture when there is a large payment made for a long-term disability or fatality. Similarly, experience based solely on accident frequency rates may unfairly penalize an organization which has a lot of relatively inexpensive minor accidents compared to an organization with fewer, but which result in a more severe and costly outcome. These issues are particularly relevant to small- and medium-sized enterprises. Most importantly, experienced based insurance ratings focus on historical records and so do not take into account the efforts an organization may be making to reduce future risk. However, there would perhaps be some benefit in insurance providers pooling their collective experiences and statistics on an industry basis to help identify particular business sectors which might benefit from more specifically targeted health and safety initiatives.

A more effective and fairer way in which organizations could be rewarded for the efforts in creating more healthy working environments would be to link incentives to stress audits and the presence of stress intervention programs. A rather similar scheme, the Work Injury Reduction Program (WIRP), is currently being trialled in Alberta, Canada. Employers who have voluntarily opted to join the scheme are required to undergo an annual audit of their management systems. This audit focuses on six areas: corporate leadership; operations; human resources; facilities and services; administration and health; and safety information and promotion.

The organization's performance is scored out of a possible 2000 points to provide an index of progress. Employers are required to take action on the results of this audit and the report recommendations to qualify for financial incentives. The potential exists for large companies to receive incentives as high as $2 million.

3. Specific assistance for small- and medium-sized enterprises (SME)

The low participation of SMEs in stress prevention and health promotion activities is a another source of concern, because SMEs form a major proportion of EU businesses—with some 40% of companies employing less than 10 people and around 60% with less than 50 [25]. This may be due to lack of resources, lack of skilled personnel, and/or lack of access to information. Time and financial costs are more problematic for smaller companies. The pricing structure of employee assistance programs means that these kinds of services are generally not available on an

individual basis to SMEs. Only 44% of EU workers are covered by in-plant services or have access to group occupational health services [24]. Access to stress management training provided by external agencies is significantly more limited and difficult for SMEs. Certainly, the provision of more government/EU-funded training opportunities and easier and more open access to information and courses specifically targeted at SMEs would help in this respect.

Another possible way in which SMEs could access professional help and expertise would be for companies to combine to share the costs of preventative services, along the lines of group practice models operating in some EU member states (e.g., The Netherlands). In The Netherlands, all employees have access to a panel of professionals who will provide them with occupational health and health and safety services. These services are funded by levies paid by the organization based on the size of their work force. In Sweden, prior to 1995, all organizations paid a levy into a central fund, the Working Life Fund, which provided employers with access to professional help and expertise on work-related health issues which they could call upon for advice on organizational problems. In addition to providing information and guidance, the Working Life Fund undertook specific projects at the corporate level. The combination of these two kinds of services to provide assistance to both employees and employers would be greatly beneficial to SMEs.

4. More information and research

The level of research activity in the area of occupational stress and stress prevention varies considerably from country to country, as does the level of organizational activity. Much more research is needed, particularly studies that evaluate the long-term effectiveness of stress intervention strategies. There is also much to be learned from the dissemination of more practical case studies of organizational practice and experience in stress prevention. Stronger industrial links between the business community and academic institutions can promote this type of activity, particularly when there is some joint investment.

The conventional sources of research funding provided through government research grants awarded to academic institutions are increasingly limited. This suggests that alternative sources of funding may be needed to ensure that the research activity keeps pace with the demand for knowledge.

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