Research Must Look at What Interventions Work as Well as When and Why

RESEARCHER RESPONSE

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ABSTRACT
This discussion paper is well-written and up to date. A strong feature is its attention to the biological and behavioural mechanisms that connect exposure to certain job characteristics with illness. First, some remarks are made with respect to the definition and measurement of psychosocial risk factors. It is concluded that we do know which factors in work are major risk factors for stress and its consequences for ill health, and that in order to prevent or reduce occupational stress we must first make a reliable and valid diagnosis, identifying these risk factors and risk groups. Next, some issues are discussed regarding future priorities (interventions and monitoring). It is argued that in order to develop further a "psychosocial intervention science," we will need to address three types of questions.

Dr. Vézina and his colleagues ought to be commended for their well-written discussion paper. The paper builds a bridge between theory and data from empirical studies, on the one hand, and research policy with respect to prevention and intervention and actual preventive workplace strategies on the other. A strong feature of their paper is its emphasis on the biological and behavioural links between

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exposure to certain job characteristics and illness. Moreover, the paper provides some interesting Canadian figures about stress at work.

In this commentary I will concentrate first on the “state of knowledge” part of their paper; then I will comment on the priorities that are suggested.

**Remarks with Respect to the Definition and Measurement of Psychosocial Risk Factors**

Vézina and his co-authors are too pessimistic when they state that there is a “regrettable absence of scientific consensus on how to define and measure a high risk psychosocial work environment.” In fact, they present such a classification themselves. Elsewhere (Kompier 2003), we have discussed the seven most prominent theoretical approaches in this field, including the two models that are discussed by the authors (the demands-control model and the effort-reward model), in order to identify critical job features: those factors in the psychosocial work environment that may either cause stress or promote motivation or learning. In this respect there is a remarkable overlap between these models. These critical job characteristics are “job demands” (six out of seven models), “autonomy” (six) and “skill variety” (six). Other important psychosocial job characteristics are “social support” (four), “feedback” (three), “task identity” and “job future ambiguity” (each three).

It is only partly true that, as Vézina et al. (2004) state, the DCS and ERI models identify distinct psychosocial determinants. In fact the concept of job demands (DCS model) is comparable to that of extrinsic effort (ERI model) (for a further comparison, see Kompier 2003).

From the above it follows that (1) we do know which factors in work are major risk factors for stress and its consequences for ill health, and (2) in order to prevent or reduce occupational stress, we must first make a reliable and valid diagnosis, identifying these risk factors and risk groups. Such an assessment should thus focus on job demands, autonomy, skill variety, social support, feedback, task identity and job insecurity. As Vézina et al. report, validated questionnaires have been developed to assess these job features.

These job features are not only “toxic components.” Numerous studies have taught us that stress and motivation can be regarded as two sides of the same coin. If work provides the right mix of work characteristics – that is, high but not too high demands, enough but not too much control and support, and so forth – work stimulates motivation and mental health, as well as productive performance. When work does not provide a proper configuration of work characteristics, it may provoke stress reactions. Healthy work may well be productive work (Karasek and Theorell 1990).

**Comments on Priorities: Interventions and Monitoring**

According to the authors, ignorance of the definition and measurement of psychosocial risk factors is the reason why actual workplace strategies to prevent mental health problems at work are predominantly individual and reactive. We believe that this is but one reason. Other important reasons are the following: (1) senior management has individualistic attitudes and values and tends to point at within-person factors instead of within-work factors in case of stress complaints; (2) because of their training, many professional interventionists (e.g., occupational doctors and psycholo-
gists) are more comfortable with changing individuals than changing organizations (Cooper and Cartwright 1994: 458); (3) stressors may be inherent in the job; (4) the yet limited empirical evidence that interventions in the psychosocial work environment may reduce mental health problems; (5) the study of the costs and benefits of stress prevention has been largely neglected (see also Kompier and Kristensen 2001).

To overcome these hurdles, as Vézina et al. (2004) state, “the priority objective of a long-term research agenda on mental health and the workplace should be to produce knowledge that fosters the development of well-adapted interventions designed to reduce adverse psychosocial factors and their mental health effects.” I support that conclusion: there is a strong need for well-designed and well-implemented prevention and intervention studies. The scientific study of work organization interventions is both difficult and challenging, because such studies do not take place in the laboratory but in the natural context of quickly changing organizations. This organizational context is not under the control of scientists. Moreover, the people whose work is at stake – employees, middle managers and top managers – are not passive study objects. Rather, they are active shapers of their own work situation, and their actions and reactions are based on their interests, attitudes and preferences.

Therefore, if we want to develop such a “psychosocial intervention science,” we will have to carefully address three types of questions: (1) questions about the content of the interventions (e.g., is there a problem? is an intervention necessary? does the intervention address the real problem? does it address those who need it?); (2) the context of the study and its interventions (e.g., is the change process well organized and implemented? is there top management support? is there employee participation? “did the patient take the pill”?): and (3) the design of the study (e.g., is the study design adequate? are the assessment instruments reliable and valid? is the time interval theoretically valid? are subgroup analyses performed, e.g., between those with severe and mild complaints?) (see also Kompier 2003). Those questions resemble the ones about the development, implementation and effectiveness of the intervention (see also Goldenhar et al. 2001).

This all means that in order to change the predominant “bias to the individual” we need to do more than better describe potential psychosocial risk factors and to develop research instruments. Through the study of such “what,” “how” and “why” questions, the challenge, both theoretical and practical, is to build up a strong body of evidence that shows which interventions may have which effects, and under what circumstances and by what mechanisms.

Whilst prioritizing research issues, Vézina et al. (2004) follow the research directions that have been pointed out by the USA National Occupational Research Agenda/NIOSH (2002) (see also Landsbergis 2003). Inspired by this NORA report, Vézina and his colleagues, in addition to stating the priority concerning intervention research, formulate two other major objectives: (1) “The collection of data that will provide a better understanding of the prevalence of work organization risk factors, how they may be changing and how they may affect mental health over time”; and (2) “To understand the effects on mental health of prominent trends in organizational practices, such as restructuring, lean production and flexible staffing, all of which result in precarious employ-
ment and all of which may pose special risks for women, immigrants or ageing workers.”

I believe that this combined emphasis on intervention and surveillance is indeed what is needed to bring advances in this field, not only from a theoretical perspective, but also for practical reasons, that is, in order to reduce stress problems on the national, sectoral and organizational levels.

References


