Optimising workplace interventions for health and well-being: A commentary on the limitations of the public health perspective within the workplace health arena

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#### **Abstract**

*Purpose:* This paper discusses contemporary approaches to workplace health and well-being, articulating key differences in the intervention architecture between public and workplace health contexts and implications for intervention design.

Approach: Contemporary practice is discussed in light of calls for a paradigm shift in occupational health from a treatment orientation to an holistic approach focused on mitigation of the causes of ill health and the promotion of well-being. In practice, relatively few organizations have or seem able to engage with a broader perspective that encompasses challenges to health and well-being associated with contextual organizational drivers, e.g. job design / role, workload, systems of reward, leadership style and the underpinning climate. Drawing upon insights from public health and the workplace safety tradition, the scope for broadening the perspective on intervention (in terms of vectors of harm addressed, theory of change and intervention logic) is discussed.

Findings: There are important differences in scope and options for intervention between public health and workplace health contexts. While there is scope to emulate public health practice, this should not constrain thinking over intervention opinions. Increased awareness of these key differences within work organizations, and an evidence-based epidemiological approach to learning has the potential to strengthen and broaden the approach to workplace health and well-being management.

Originality / Value: We argue that approaches to workplace well-being interventions that selectively cross-fertilise and adapt elements of public health interventions offer promise for realising a broader change agenda and for building inherently healthy workplaces.

*Keywords:* workplace interventions, health and well-being, public health.

## **Background**

Recent decades, have witnessed the emergence of notable consensus over the need to address defining influences on employee health and well-being in the modern workplace. The dominance of the (ill) health treatment perspective is increasingly viewed as a partial in both public and occupational health practice (HM Government, 1999; Black 2008; Mellor, Karanika-Murray, and Waite, 2012). Of particular note is the recognition of the key role played by psychosocial influences on employee health and well-being. While this represents a notable advance or supplement to traditional biomedical treatment perspectives, to date this insight has had limited impact on occupational health practice. In addition, partly as a product of the recognition that health (and well-being) is more than the absence of ill health (WHO, 1948) and partly due to concerns within the UK Government regarding the economic (un)sustainability of a treatment-centric perspective (HM Government, 1999), combined with an underpinning desire to reduce sickness absence (Black and Frost, 2011), the last decade has witnessed an unprecedented public policy emphasis on preventing ill health and promoting good health.

Fundamentally, health promotion and ill-health prevention are complementary risk reduction agendas. Critically, they are also pre-emptive intervention agendas. As such they embody a commitment to 'social engineering' and the belief that stakeholders, including employers, the Government and the health service, should play a role as social engineers, in actively seeking to find ways to reduce rates of ill health and enhance well-being. This is a change agenda, that raises questions for researchers and practitioners over how best to achieve change. This has given rise to a number of influential reviews of the social science literatures on human behaviour (see, for example, NICE, 2007; Dolan et al, 2010), The majority of these, however, have had a public health rather than an occupational health focus.

By contrast, occupational health reviews are rarely encountered (Black, 2008; Lunt et al, 2007) and in some cases remain bounded by elaborations on the pubic health perspective.

This paper considers the implications of applying public health intervention perspectives in the workplace and discusses some of the implications for workplace health and well-being practice. A central premise of this intentionally partisan article is that key differences exist between public and workplace health contexts with respect to vectors of harm, intervention logic, theory of change and the breadth of intervention options.

Before commencing further, it is necessary to establish that our definition of *intervention* in this paper is broader than the term's historical use within the health domain, this having been characterised as: "An activity undertaken to prevent, improve, or stabilize a medical condition" (McGraw-Hill, 2002). Rather, our definition extends to the scope or modification of environmental (physical, organizational and socio-technical) and socio-cultural elements in the workplace with the purpose of maintaining or enhancing health and well-being. Moreover, reflecting contemporary perspectives on well-being our definition of occupational health encompasses health and safety, managing ill health, prevention of ill-health and promotion of employee health (Black 2008; GLA economics, 2012).

## Health and Well-Being at Work: Perspectives on Intervention

Work organizations are a potentially valuable conduit for the promotion of public health (Egan *et al.*, 2007; Waddell and Burton, 2006), in essence amplification stations (Kasperson *et al.*, 1998) for health promotion (Black, 2008; Fleming, 2007; Shain and Kramer, 2004; Tetrick and Quick, 2002). We might also speculate a ripple effect, whereby employee behaviour change achieved via the workplace may percolate to impact on the health orientations and behaviours of family and kinship members beyond the organization. The workplace thus affords a potentially valuable focus for propagating the realisation of key

lifestyle public health objectives (Black, 2008). However, it offers the opportunity for more than this.

From a risk reduction and mitigation perspective, workplace health and well-being interventions can reasonably be conceptualised in terms of a hierarchy: primary (prevention and mitigation of risk, including monitoring exposure), secondary (treatment following exposure) and tertiary (rehabilitation to work) (for example, see LaMontagne *et al.*, 2007). A comprehensive approach requires that employers develop integrated systems that address all three elements. Moreover, to achieve sustainable results and alignment with the established UK regulatory philosophy ("duty of care"; Health and Safety at Work Etc. Act, 1974) the primary focus should be on preventative elements (Black, 2008; LaMontagne *et al.*, 2007; Kohler and Munz, 2006). To this may be added further risk mitigatory activity relating to behaviourally focused promotion of lifestyle health, e.g. smoking cessation, healthy eating, increased physical activity, offering intuitive gains in sickness-absence reduction and a contribution to broader public health objectives.

However, common experience is that mainstream employer perspectives remain focused on the consequences of ill health and sickness-absence and the perspective on well-being limited to lifestyle promotion activity, a common denominator being a focus on individual (rather than organizational systems) 'solutions'. We would contend that the latter, while making a contribution, constitutes an extension of the traditional biomedical/treatment perspective, rather than a prevention orientation per se (see Lunt *et al.*, 2007). As Butterfoss et al note, a comprehensive perspective on health promotion requires "...multiple interventions aimed both at individuals who are at health risk, and at risk-producing environments and policies" (Butterfoss et al., 1993). Moreover, it has also been observed that "...occupational safety and health and worksite health promotion professionals view the

workplace in different ways (from psychological and public health orientations, respectively) that may result in siloed work environments" (Goetzel et al., 2008).

Where the perspective on pro-active prevention is limited to lifestyle health issues there is arguably a risk of diverting attention from addressing deeper, more fundamental, influences on employee well-being rooted in the design of work, underpinning management systems, and from developing holistic approaches to intervention (Kohler and Munz, 2006; Mellor *et al.*, 2012; Munz *et al.*, 2001). In particular, the lifestle peeerspective can offer little to addressing headline causes of absence: job-stress, mental health and musculoskeletal disorders (HSE, 2000; Amati and Scaife, 2006).

While physical hazards to health readily lend themselves to the established safety-engineering risk mitigation solutions and lifestyle choices can reasonably be addressed using public health behaviour change models (see, for example, Ajzen, Fishbein; 1980; Ajzen, 1985; Prochaska, and DiClemente, 1986; Rosenstock et al, 1988: for reviews see NICE, 2007 and Lunt et al, 2007, many organizations seem to find dealing with psychosocial aspects such as job-stress and mental health issues more challenging to address. Put simply, the subject matter seems to lie beyond the comfort zone of most safety professionals, familiar with a systems oriented risk-based approach, with the latter amounting to foreign territory for (many) health professionals bounded by an (individual focused) treatment perspective. More fundamentally, however, the underpinning science on 'solutions' on these issues is less than well-mapped.

In instances where employers do engage with psychosocial topics their activity tends to be a broad brush, 'one size fits all' approach, e.g. education / training initiatives on *managing change* or *coping with stress*. Organizations tend to be data-poor, in terms of identifying which of their employees are at risk, either as individuals or as groups of vulnerable individuals engaged in certain jobs/functions. Differentiated activity tends to be

limited to the treatment and rehabilitation of those who have succumbed (HSE, 2005b; Biron et al., 2009; Cox et al., 2007;2009; Daniels et al., 2012).

There are well rehearsed debates in the public health arena regarding the relative merits of undifferentiated (whole population) and segmented (targeted) approaches to intervention (see, for example, Adams and White, 2005), a reasonable conclusion being that both can make a contribution to meeting public health targets. However, we would suggest that arguments in favour of undifferentiated approaches are significantly weaker in the workplace health context.

## Undifferentiated (Whole Population) Approaches

There is an established consensus that rates of impact attributable to undifferentiated / whole population interventions (for example, communication campaigns publicising health risks associated with a given activity) tend to be low and routinely amount to single figure percentages (see NICE, 2007). The case for undifferentiated interventions in public health contexts rests upon the premise that impact on even a small proportion of individuals can equate to significant net gains when directed at large populations. For example, an impact metric of 2% of the population of Great Britain equates to impact on approximately 1.4 million individuals (see Rose 1985, 2001). However, it is clear that an equivalent metric would produce very modest benefits for the average employer, in terms of incidence of ill-health, reductions in days lost, etc.

This conclusion brings counter arguments to undifferentiated approaches to intervention in the workplace into sharp focus. Detractors of undifferentiated approaches hold that, at best, they offer partial solutions, rather than complete solutions informed by a clear focus on *who is at risk*, *under what circumstances*; they fail to take account of differences in knowledge and orientations of those exposed; are potentially wasteful, as the

scatter-gun approach results in resources being directed at non-relevant individuals or groups; they dissipate (routinely scarce) resources; and, can cause unnecessary anxiety among those at low or negligible risk (see *Saving Lives: Our Healthier Nation*, 1999; Adams and White 2004; Charlton, 1995; Davison *et al.*, 1991; Rockhill, 2004). Perhaps most pertinently in the workplace context, forseeably modest demonstrable metrics of impact risk undermining the business case for investment in a *proactive* approach to health and well-being.

Why, then, do undifferentiated approaches remain popular amongst occupational health professionals, given evidence of their strong potential to defeat (seemingly universally desired), business case objectives? Should we attribute this, possibly in combination, to some fundamental gap in understandings of the principles of workplace health professionals (Cox *et al.*, 2009), over-confidence in the impact of educational initiatives (NICE, 2007), the simple mimicry of public health practice, or perhaps the relative ease with which such interventions can be configured?

# Differentiated (Segmented) Approaches

By contrast, the *high-risk tradition* advocates an informed evidence-based approach, rooted in contextual insight arising from gathering intelligence to identify the most vulnerable and targeting intervention efforts towards those known to be at greatest risk (Charlton, 1995; Davison *et al.*, 1991). While this has been the tradition in the regulatory approach to occupational safety in the UK, it does not constitute a strong tradition in occupational health or, historically in public health. However, the push for evidence-based policy delivery in Britain (HM Government, 1999) over the past decade has witnessed some redress in the latter, with increased emphasis on segmented (targeted) approaches (see Adams and White, 2004).

A core advantage of the high-risk approach is held to be higher rates of impact due to the enhanced relevance of the intervention to target groups, combined with gains from concentrating available resources. A targeted approach is said to facilitate what can amount to a higher per-capita resource allocation, i.e. a higher proportion of limited resources can be dedicated to vulnerable individuals or groups. A corollary of this is that it can also broaden the scope of intervention activity, i.e. passive (media-based) communication interventions are routinely adopted because resources preclude more active alternatives, where the same resource allocation directed at fewer individuals might release resources for more active engagement.

However, while directing resources at 'high risk' individuals or groups has strong intuitive appeal, an important caveat to this perspective is that members of high-risk (sub)populations may also exhibit the characteristics of being 'highly resistant' (to change) or 'hard to reach'. For this reason when making strategic decisions over a targeted approach it is necessary to take account of variables beyond magnitude of exposure/susceptibility to harm, and consider aspects related to the scope for influence (Weyman, 2012; Weyman et al., 2012).

#### **Intervention Architecture**

A key contrast between public and workplace health contexts relates to the intervention architecture, specifically the array of variables that are amenable to influence to achieve change and improvement.

In public health contexts, beyond structural activity such restrictions to advertising (alcohol and tobacco), food labelling and similar, the primary emphasis tends to be on finding ways to motivate individuals to behave differently in the context of a constant World.

Activity here tends to draw heavily on psychology behaviour change models (see reviews by

NICE, 2007, and Lunt et al., 2007) focused on motivating (typically) caution. Arguably this reflects the relatively limited scope for influencing situational and cultural variables, rather than any fundamental lack of awareness regrinding their salience. As Fertman et al. note "Exploration of the interaction that occurs between individuals and their environment in regard to health has been a hallmark in the progress of nations in promoting and improving the health of individuals and the community at large. This ... ecological perspective highlights people's interaction with their physical and sociocultural environments" (Fertman et al., 2010). The resultant partial focus on vectors of change (predominantly individual rather than situational drivers of behaviour), essentially represents 'Hobson's choice', but is a situation that is in marked contrasts with the workplace where the context in which behaviour takes place represents a much more (potentially) controlled environment. A significant array of influences that challenge employee well-being being are essentially malleable and amenable to influence, i.e. work organizations have significant control over choices regarding systems of work, job design, reporting arrangements and staff performance criteria (Offermann and Hellmann, 1996). This significantly broadens the scope of intervention options and permits a more holistic, ecological approach to influence contextual variables than is available to practitioners in public health contexts.

When considering the array of variables that impact on behaviour on a given issue this will routinely result in the identification of an array of individual and situational influences. "The ecological health perspective helps to locate intervention points for promoting health by identifying multiple levels of influence on individuals 'behavior and recognizing that individual behavior both shapes and is shaped by the environment" (Fertman et al, 2010). The relative importance of each, in terms of their impact on behaviour, will vary with the issue under consideration, but an holistic approach to intervention would involve elements that address both, e.g. in the case of health-lifestyle interventions while in public health

contexts options for intervention predominantly relate to educating people about the advantages of health diets and the perils of smoking or excessive alcohol consumption, beyond fiscal manipulations, or restrictions to use, the scope for influencing situational variables is limited. In the workplace changes to the array of foods available in the refectory (Thaler and Sunstein, 2008), the availability of smoking areas and similar offer greater opportunity to address situational variables (see Goetzel et al. 2008). By extension, known sources of work stress might be ameliorated through job re-design (Jordan et al, 2003), the provision of support to vulnerable staff (Kerr et al, 2009), the employer facilitating access to health / treatment services to enhance rehabilitation, or making adaptive changes to the design of jobs based on capacity to work (see Black, 2008). Yet, practical experience indicates that encountering employer-led intervention activity that addresses these more fundamental potentially higher impact influences remains the exception rather than the norm.

When considering the array of influences on employee health and well-being, a key consideration relates to whether exposure to harm is the product of individual volition or whether it is a product of the design of work, including the social relationships and management style that underpin it or, in many instances consideration of the relative influence of individual versus situational variables.

The array of (socio-cognitive) psychology behaviour change models (see reviews by NICE, 2007 and Lunt et al, 2007) widely applied within the public health domain hinge on the dual assumptions that: avoidance of harm is vested within the gift of the individual; people behave as they out of ignorance, misunderstanding or lack of will-power, with solutions lying in supporting them to change *their* behaviour in the context of a constant unaltered world. While there can be merit in the use of such models for relatively circumscribed topics, such as attempts to influence employee health-lifestyle choices, they have little to offer for addressing challenges to well-being that relate to the design of work,

management style or strong (negative) cultural norms. Thus, the distinction between *unhealthy behaviours* and *unhealthy* (workplace) *conditions* is a key consideration to intervention options appraisal. It seems that a legacy of the popularity of psychology health models in the public health domain is that this perspective has come to unnecessarily and unreasonably dominate and constrain thinking over intervention options in the occupational health context (see Black, 2008).

A further notable challenge to addressing psychosocial hazards is that they are prone to be idiosyncratic to the individual or a particular work-group. Challenges to well-being in the workplace can reflect an at times complex interplay of variables where equivalent job characteristics can that produce different responses in different individuals / groups (see, for example, Boocock et al, 1998). This observation raises further questions over the utility undifferentiated 'solutions', particularly where these are generic 'off the shelf' solutions.

Rather it suggests that solutions should draw upon targeted, grounded insight derived from direct engagement with the subject matter (employees) and consideration of the sociotechnical environment in which they will be launched (HSE, 2009).

## **Cross-Fertilising Approaches and Contexts**

There can be both limitations and benefits to applying an approach developed in one context, in another context. A combined considered approach to workplace health that builds on the strengths of both the public health and high-risk approaches embodies the potentially be very powerful.

Such an holistic approach must necessarily focus, not only on the development of a culture that promotes lifestyle well-being, but also, on the creation of organizational systems that minimise, or mitigate, challenges to employee health on a broad front (Semmer, 2006), "... in other words [address], the social determinants of health (Fertman *et al.*, 2010). In

practice, comprehensive holistic approaches to workplace health that combine primary (preventative), secondary, and tertiary intervention strategies, that address both the causes and consequences of health at work and fortify individuals with the necessary skills and knowledge, offers the most promise in terms of benefits to employees and employers (Jordan *et al.*, 2003; LaMontagne *et al.*, 2007; Mellor *et al.*, 2012; Taris *et al.*, 2010).

However, as noted above, holistic approaches are rarely encountered. From the relatively small number of studies to date (for example, Cox *et al.*, 2007, 2009) it seems that there is significant scope to build upon and expand the established risk-based model and use this to support the broadening of employer perspectives and practice on dealing with the wellbeing, psychosocial health and mental health agendas. Indeed, this is the intent of the British Health and Safety Executive's, *Management Standards for Stress* methodology (HSE, 2009). A limitation of the latter, however, in common with other themed initiatives relates to its single-issue focus (Cox *et al.*, 2009). Specifically, themed approaches tend to be finite in terms of their impact, in so far as they rarely become embedded in custom and practice and, indeed, may be in tension with the general approach and established practice on other health well-being topics.

A number of risk management frameworks (e.g. Giga et al., 2003; Kohler and Munz, 2006; Taris et al., 2010), including the HSE Management Standards for Stress (HSE, 2009), and an array of safety climate development tools resonate with such a strategic approach to investment in employee health and well-being. They offer a set of generic principles for mitigating health risks and challenges to well-being that are applicable beyond single issue agendas, with implications on management style and organizational culture. In this they embody the promise of long-term, sustainable changes in the work environment, control systems and an infrastructure that is inherently health promoting. However, with a small

number of notable exceptions (see, for example, Jordan et al, 2003), to date, there remain relatively few examples of organizations successfully applying these principles.

Our premise here is not to suggest that singe issue interventions, or indeed a focus on individual rather than situational elements is inappropriate. Rather, our intention is to merely put the case that if this represents the boundaries of employer perspectives on intervention then the most that that can be realised is partial solutions, which will tend to be non-durable, as they are prone to be dislocated from the general approach (established custom and practice), rather than a well meshed component of an integrated perspective on health and well-being. Our suggestion is that what is needed is an holistic perspective that integrates insights from public health and risk management traditions in order to address health and well-being on a broad front, taking account of both individual and situational influences. In larger organizations this would likely benefit from the adoption of an epidemiological perspective orientated around learning through gathering high quality data on exposure to the potential for harm, with a view to reaping the benefits of a targeted approach to intervention (Weyman, 2012).

Indeed, there is evidence of movement among practitioners in the direction of being selective. Increasingly, researchers are arguing for more attention on context and process issues to achieve successful interventions (e.g. Biron *et al.*, 2012; Cox *et al.*, 2009; Nytrø *et al.*, 2000; Saksvik *et al.*, 2002), emphasising the benefits of optimising the fit of activity with characteristics of the organizational system or context to achieve sustainable outcomes (see, also, Thaler and Sunstein, 2008). Here, the setting for workplace health simultaneously encompasses the sources of risks to ill-health but also potential resources for promoting well-being.

# Organizational Learning - An Iterative Perspective on Intervention

One of the foremost opportunities that the workplace context can offer to the promotion of well-being is the capacity for organizational learning to support the development of strategic, well targeted, theoretically and contextually informed interventions focused on root causes (LaMontagne *et al.*, 2007; Taris *et al.*, 2010). The relationship is reciprocal, as planned organizational learning could potentially augment the proportional benefits of efforts and resources allocated to well-being.

The key to successful workplace intervention rests, first, upon the organization developing a clear contextualised understanding of potential challenges to employee well-being and its current performance in mitigating these. In the case of medium and large organizations, this requires the development of data capture systems that go beyond monitoring outcomes, typically injury / ill health prevalence rates, days lost, which focus on the active measurement of potential, i.e. measures of organizational performance in managing precursors of challenges to well-being, e.g. prevalence of known stressors, the incidence and distribution of symptoms, employee take-up of lifestyle promotion initiatives and so on. Key to the learning process is how, having established a suitable suite of precursor performance measures, the organization uses this evidence to inform future decisions over priorities and strategy for intervention.

However, it is in the area of organizational learning and developing effective systems to achieve this that guidance on good practice seems to be conspicuous by its absence. There is currently a dearth of guidance aimed at work organizations on how senior managers and practitioners might develop and apply precursor performance measures in a manner that contributes to organizational learning. In addition the position of health/well-being professions as resource negotiators tends to be weakened by the absence of a battery of convincing performance measures when negotiating at board level. However, it is important

to consider what constitutes convincing evidence. Here it seems the public health experience has something to offer, as debates are more mature than in the occupational health arena (McQueen, 2002). But it is important to keep in mind that the possession of good evidence does not guarantee success; this hinges upon "...the expertise of individual practitioners. .. for an effective intervention, other critical areas in addition to evidence need to be taken into consideration—for example, the needs and expectations of direct service recipients, the interests of other key stakeholders, and the competency of a practitioner in planning and evaluation." (Tang *et al.*, 2003).

## Weaknesses in Underpinning Evidence

A central issue is that options for intervention are underpinned by a strong evidence base of causal influences and solutions (see Waddell and Burton, 2006). The more complete the knowledge, the greater the scope for an informed strategic approach to intervention. However, although health and well-being evidence base is sufficiently mature to support a broad consensus over sources of harm (Black, 2008), the amassed evidence on cause-effect relationships is some way off offering a complete picture (e.g. Rick et al., 2002) and the list of solutions are underdeveloped. A firm understanding of the well-being aetiological framework is complicated by a range of considerations, including: the influence of personal dispositional factors and emotional processes in the work experience (Daniels et al., 2002, 2004); delays between exposure and onset of symptoms (e.g., de Lange et al., 2004); high within-group variation for some psychosocial issues (e.g., autonomy); non-linear effects of work factors (at least in the short- to medium-term; Karanika-Murray, 2010) rendering specific aspects of work as both sources of satisfaction and fulfilment and as potential challenges to well-being (Harris and Kacmar, 2006), and amplification effects in symptom reporting (Weyman and Boocock, 2001). The general conclusion is that the ways in which

work impacts on health can vary according to health outcomes and across aspects of the work environment and work organization (Waddell and Burton, 2006); this is supplemented by calls for carefully developed research to strengthen the aetiological framework for intervention design (Black, 2008).

The evidence on 'what works', and under what circumstances, in terms of workplace health interventions is weak, at best and in many instance inconclusive, (Caulfield et al., 2004; Hill et al., 2007; Jordan et al., 2003; LaMontagne et al., 2007; NICE, 2007). Much of the evidence that is available is descriptive and lacking in rigour, making it difficult to develop clear recommendations that can reliably inform practice (Spurgeon, 2002; Robson et al., 2007), with limited good quality evaluation evidence and widespread general methodological weakness (Briner and Reynolds, 1999; Caulfield et al., 2004; LaMontagne et al., 2007; Nytrø et al., 2000; NICE, 2007). To complicate things still further, there is confusion among employers over which tools and techniques to apply to a given agenda and how to make the most of the limited number of tools and techniques that are available (see Broughton et al., 2009; Cox et al., 2007, 2009). There seems to be a thirst for 'How to' Guidance, of which there is currently very little. The evidence base on which current guidance and practice relies, offers significant scope for development, in order to provide organizations with a clearer perspective on solutions and to strengthen practitioners' confidence in available intervention tools as well as their understanding on how to use them to maximal effect.

#### **Conclusions**

In this paper we have attempted to provide a commentary on points of synergy and divergence between public and occupational health intervention contexts. Essentially, health and well-being at work constitute a sub-category of public health. However, when

considering options for intervention to achieve change and improvement it is apparent that there are important differences in terms of the scope for influence and related theories of change. In particular, it is apparent that there is enhanced scope to impact upon situational variables, including behavioural elements, in the workplace than is the case in public health contexts.

An informed approach that builds on cross-fertilisation of knowledge between the public and workplace health domains offers promise, not only for successfully managing work-related health through design, but also for developing sustainable change. This can be achieved by fortifying the foundations of healthy organizations (cf. Black 2008) and healthy working lives that "continuously provide[s] working-age people with the opportunity, ability, support and encouragement to work in ways and in an environment which allows them to sustain and improve their health and well-being" (*Health Works*, 2009: 7). In terms of practice, an important question lies in the utility of current approaches in terms of meeting the needs of the work context, but also on bringing about more permanent changes in the work environment and control systems and developing an infrastructure that is inherently health promoting (cf. European Agency for Safety and Health at Work, 2010).

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