

Are healthy workplaces innovative?

How workplace health management can help launching workplace innovation

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Abstract

Based on a review of existing literature and studies, the author explores the synergies between workplace innovation and workplace health management. The object of investigation is the overlap between workplace health management and workplace innovation, with a hybrid primary focus on concurrent improvement of organisational performance and quality of working life. The review provides an insight into which internal and external elements play a decisive role in the process towards better performance and quality of working life. The author clarifies how workplace health management and workplace innovation share common ground with respect to the salutogenic quality of an organisational system. Moreover, he suggests a model to conceptually distinguish workplace health management and workplace innovation with regard to the specific focus. Finally, the comparison points to opportunities how the two concepts can reinforce each other.

Keywords: workplace innovation, workplace health management, occupational health, salutogenesis, salutogenic organisation, quality of working life, organisational performance

Introduction

Occupational health is an integral part of workplace innovation. Good health is not only an enabler of workplace innovation, but it is also part of its outcome in the form of quality of working life (Kesselring, Blasy & Scoppetta 2014).

Hence, the concept of workplace innovation cannot be easily distinguished from workplace health management, and the question arises how the two concepts correlate. While comparing the two, it becomes obvious that they share common ground at different levels such as the supporting theories, suggested interventions and expected effects (Eeckelaert et al. 2012; Pot & Koningsveld 2009a).

Both concepts follow the *line of argumentation* of the “happy-productive worker hypothesis” (Pot & Koningsveld 2009b, p. 10) based on the interdependency of working conditions and organisational performance. In terms of their *theoretical foundation*, they both refer to the job-demand-resource model explaining the relation between work organisation, individual performance and well-being (Demerouti et al. 2001). As a consequence, the two concepts suggest implementing *measures of interventions* which are built on the principles of socio-technical systems (Ulich & Wülser 2014; Dortmund / Brussels position paper on workplace innovation 2012). And finally, they are meant to produce similar *outcomes* aiming at improvements in quality of working life and organisational performance (e.g. Kesselring, Blasy & Scoppetta 2014).

Research question

In light of this overlap, the article is concerned with the relationship between workplace innovation and workplace health management. The objective is to provide:

- conceptual clarification of the relationship between workplace innovation and workplace health management.
- empirical evidence of the overlap between workplace innovation and workplace health management.

There is a certain controversy to what extent workplace innovation can lead to better health in the workplace. For example, Eeckelaert et al. (2012, p. 30) conclude that most probably measures of workplace health management in the area of “organisation, stress and well-being” relate to workplace innovation (see also Pot & Koningsveld 2009a). Contrary to this, the OECD (2010, p. 131) report on innovative workplaces refers to some empirical studies “that show that all types of workplace innovation are associated with lower average employee well-being and job satisfaction”. Practices of workplace innovation may enhance the quality of working life, but may also reduce it, for example, through increased responsibility and greater competence requirements (Ramstad 2014).

On the other hand, quality of working life as a potential outcome of workplace innovation correlates with the workers’ well-being (Huzzard 2003; Gallie 2013). Therefore, the assumption is that particularly those practices of workplace innovation which aim at simultaneous improvements of organisational performance and quality of working life refer to the same elements and processes as workplace health management.

Method

The author investigates the overlap between workplace innovation and workplace health management by revising existing theory and relevant studies. Assuming that the quality of working life connects workplace innovation with workplace health management, the author selects working definitions of both concepts that explicitly refer to simultaneous results of enhanced performance and quality of working life.

Taking this specific focus into account, a narrow choice of selection criteria is applied when seeking out relevant studies. Only studies were selected that analyse work practices that comprise a social process with simultaneous (positive or negative) impact on the organisational performance and quality of working life. Such a narrow search radius avoids combining fragmented evidence of different studies. With respect to the chosen focus however, it is important to avoid tautology when interpreting the data. The findings only apply to the shared common ground based on the chosen focus. This specific perspective is helpful to focus on those aspects which help clarifying how the two approaches can reinforce each other.

Workplace innovation

Workplace innovation is a broad concept that unites diverse narratives about the workplace and work organisation. For example, workplace innovation is related to concepts like high performance work systems (Cox, Rickard & Tamkin 2012), innovative workplaces (OECD 2010), employee-driven innovation (Høyrup 2012) or the learning organisation (Senge 1990).

These various approaches share common ground. They all include practices from domains such as human resource management, organisational development and innovation management aiming at increasing labour productivity, development of competences, organisational learning, innovativeness or enhancing quality of work life (Kesselring, Blasy & Scopetta 2014).

Cox, Rickard and Tamkin (2012, p. 22) distinguish three kinds of focus for implementing concepts of work organisation related to workplace innovation:

1. *Single primary focus* on enhancing organisational performance
2. *Parallel focus* on multiple innovations, some aimed at organisational improvements and some focused on employee benefits
3. *Hybrid primary focus* on innovations aimed at employees with consequent benefits for organisation.

As aforementioned, when exploring the correlation between workplace innovation and workplace health management, those kinds of workplace innovation are of particular interest, which result in both, better performance of the organisation and better quality of working life of the employees ('hybrid primary focus'). It is to be expected that quality of working life and work-related health are entirely overlapping.

In this respect, the Dortmund / Brussels position paper on workplace innovation (2012, p. 1) provides a suitable definition:

“Workplace Innovation is defined as a social process which shapes work organisation and working life, combining their human, organisational and technological dimensions (...). This simultaneously results in improved organisational performance and enhanced quality of working life.”

However, workplace innovation does not follow a linear cause-and-effect relationship because workplace innovation is “likely to affect its own enablers”. For example, good health is an enabler *and* a result of workplace innovation (Kesselring, Blasy & Scoppetta 2014, p. 35).

Quality of working life

Besides the “process-outcome complexity of workplace innovation”, (Kesselring, Blasy & Scoppetta 2014, p. 20), both results, organisational performance and quality of working life, are multidimensional phenomena allowing for a variety of interpretations. For instance, the organisational performance can be measured in functional productivity such as quality of products and services, flexibility of customer service, the productivity of work, fluency of operations, quality of operations or in financial productivity like profit, market value, growth in sales, etc. (Ramstad 2014; Houldsworth & Jirasinghe 2006).

Similarly, quality of working life is also a complex phenomenon. Besides the fact that there is no consensus whether the quality of work describes certain types of change processes or an outcome of such processes, there are also diverse understandings of what constitutes quality of work (Huzzard 2003).

In the literature, Gallie (2013, p. 458) identifies three principles to specify aspects of the work situation as important for the quality of working life:

1. The employees own view on what matters to them in a job.
2. A set of job characteristics which enable an individual to use and extend his or her skills.
3. A set of job characteristics which have an impact on the workers’ psychological well-being and health.

With regard to job characteristics that are important to quality of working life, the existing literature suggests many characteristics of work organisation, human resource management and style of management that facilitate the development of competences and improvements of well-being (see table 1).

At the process level, quality of work can be defined as a result of the design of work organisation, the underlying managerial choices and its consequences for working conditions. Within this framework, quality of working life is regarded as “a characteristic of individuals, more specifically, as an evaluation from employees of their working conditions in the pursuit of the following four objectives”: job security, health and well-being, competence development and combining working and non-working life (Oeij & Wiezer 2002, p. 15f.).

Level	Dimension	Sub-dimension
Individual level	Socio-economic security	<ul style="list-style-type: none"> • Adequate earnings • Job and career security • Social security system
	Education & training	<ul style="list-style-type: none"> • Skill development, life-long learning • Employability
	Working conditions	<ul style="list-style-type: none"> • Safety and health at work, work ergonomics • Autonomy • Job enlargement, job enrichment • Work intensity • Participation, • Workplace relationships (with colleagues, supervisors, discrimination, harassment)
	Work-life balance	<ul style="list-style-type: none"> • Working hours • Working time arrangements
Aggregate level	Broad economic social context	<ul style="list-style-type: none"> • Labour market performance, • Collective interest representation, social dialogue at work, • Social situation like income equality, education
	Inequalities and ethics of employment	<ul style="list-style-type: none"> • Equal treatment of genders, child labour, forced labour

Table 1: *Job features facilitating improvements of the quality of working life (OECD 2013; Huzzard 2003; Gallie 2013; European Commission 2015)*

The ideas covered by quality of working life can be traced in similar themes but without using the terminology of quality of working life (Huzzard 2003). This applies in particular to concepts that focus on health aspects of work (Ulich & Wülser 2014). For example, it is related to the concept of *salutogenesis* and the question on which resources support the human health and well-being (Antonovsky 1979) or to *work ability* and the question of which methods help to extend the working life of (elder) employees (Ilmarinen 2005; Maltby 2013).

Workplace health management

Occupational health can be looked at from a *salutogenic* or *pathogenic* perspective. For instance, traditional occupational safety and health protection approaches like the definition of occupational safety and health by the international labour organisation

(Alli 2008) focus on reducing risk factors and disease outcomes. On the other hand, the salutogenic approach combines the strategy of risk reduction (pathogenic perspective) with the strategy of the development of protection factors and health potentials. Accordingly, a distinction can be made between avoiding *negative health* and developing *positive health* (Jenny et al. 2007).

However, the lines between the promotion of health and the protection of health hazards are blurred and should be united to achieve best effects on health in the workplace. In order to apply a holistic approach on occupational health, it is looked at through the lenses of workplace health management (Ulich & Wülser 2014).

Workplace health management can be defined as “the continuous participatory analysis and optimisation of organisational structures and processes that have a direct or indirect impact on the health of employees and thus influence the organisation’s business outcomes” (Bauer & Jenny 2007, p. 220).

By this understand, workplace health management builds on the four principle of the Luxembourg Declaration (ENWHP 2007) such as *participation* (involvement of all employees), *integration* (considered in all important corporate decisions), *project management* (oriented to the cycle of continuous improvement of plan – do – check – act) and *comprehensiveness* (including individual-directed and environment-directed measures as well as the pathogenic and salutogenic approach).

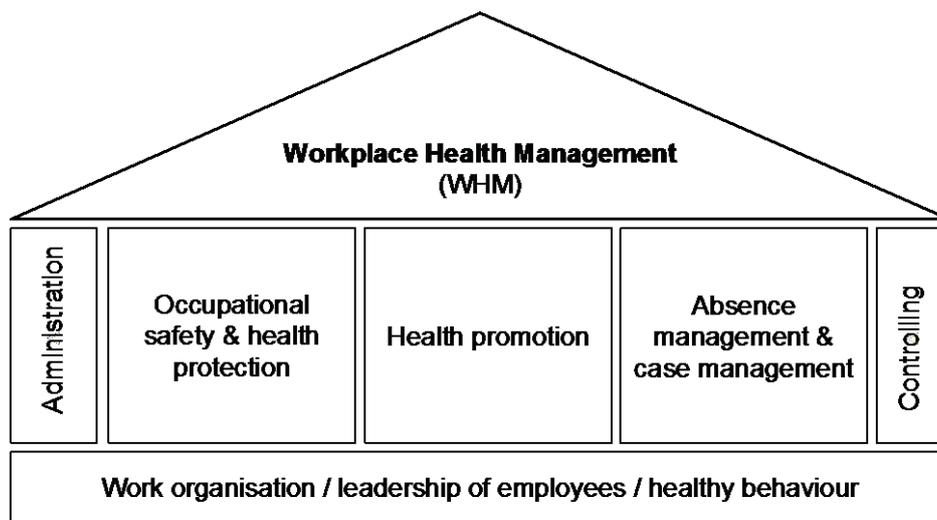


Figure 1: Dimensions of workplace health management (modelled after Ulich & Wülser 2014 and Jastrow, Kaiser & Emmert 2012)

Systematic workplace health management is perceived as a management task (see figure 1). All measures aimed at work-related health are systematically planned, organised, implemented and evaluated. Moreover, they are steered centrally but with a participatory approach. Workplace health management comprises not only measures of health promotion like healthy food in the canteen or sports exercises, but also management of human resource and labour organisation, absence and case management, occupational health and safety, management and leadership, decision making and communication (Huber 2010; Health Promotion Switzerland 2015b).

Building working conditions for positive health

According to the concept of salutogenesis, health in the workplace is determined by quantitative and qualitative job demands and individual and social resources at work (Antonovsky 1979; Bauer & Jenny 2007). And the individual reaction to the interaction of demands made and resources available at work is called work-related stress (Stavroula, Griffiths & Cox 2004; Zapf & Semmer 2004).

It is important not to confuse the scientific discourse on work-related stress with the popular understanding of stress that risks to pathologise work (Wainwright & Calnan 2013). Demands are unavoidable in the world of work and can be perceived as acceptable or even positively stimulating (e.g. for motivation, activation, learning) depending on the available resources and personal characteristics (Stavroula, Griffiths & Cox 2004).

According to the standard of DIN (Deutsches Institut für Normung), the various factors that are at work in a situation of positive or negative stress can be structured as in figure 2.

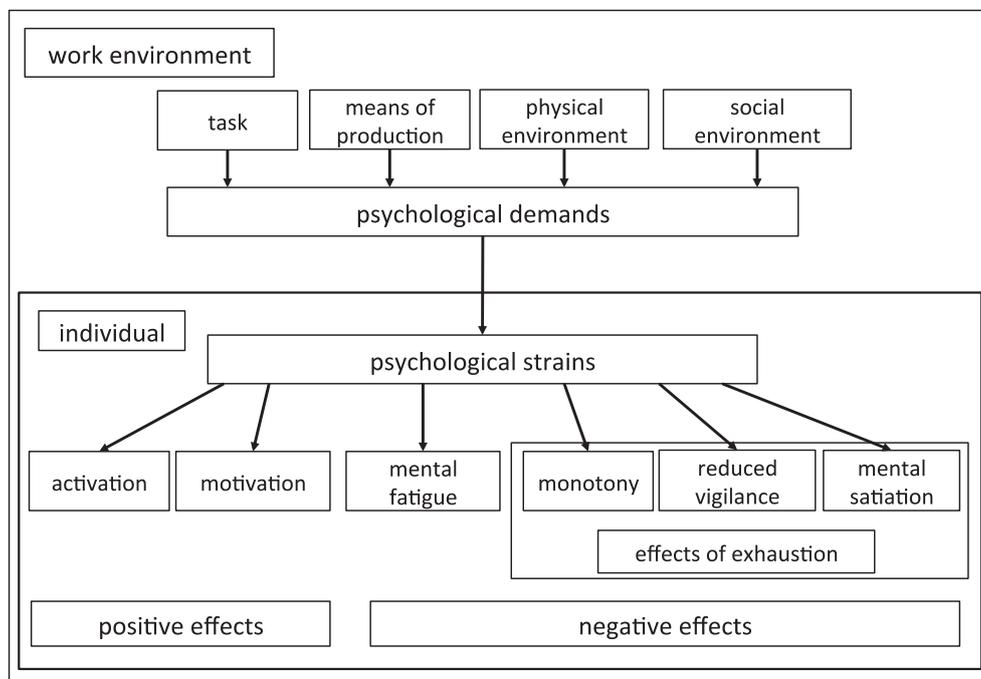


Figure 2: Terminology and conceptual correlation of demands and strains (Nachreiner 2002)

In order to explain the mechanism of stress, two approaches are particularly prominent in the literature (Ulich & Wülser 2014): The job-demand-control (JDC) model and the effort-reward imbalance (ERI) model.

The JDC-model describes work situations on the two axes of control (decision latitude) and psychological demands. Accordingly, work of low control and high psychological demands has particularly detrimental effects on health whereas high control and low demands result in low strain jobs. On the other hand, work situations of high control and high psychological demands are expected to produce activation in terms of motivation and learning ('active jobs'). Depending on the combination of demands and resources, work can produce negative or positive stress (Karasek 1979). The first JDC-model of Karasek (1979) was later extended by the dimension of support, because motivational processes play also an important role as job resources

(Karasek & Theorell 1990). And lately, the JDCS-model was further developed to the the job-demand-resources model which adds more demands and resources to the mechanism that influences work-related stress and consequently affects health (Demerouti et al. 2001).

On the other hand, the effort-reward imbalance (ERI) model of Siegrist (2002) refers to the role of workers’ rewards (e.g. earnings, esteem, promotion prospects and job security) instead of the control structure of work. Accordingly, the most stressful work conditions are those where the reward does not match the effort made by the worker. The ERI model predicts that job strain occurs when workers do not feel adequately rewarded for the effort they invest in their work. The “high cost/low gain conditions” are particularly harmful to a person’s self-regulation when success fails after long lasting investment (Siegrist 2002, p. 264f.).

With regard to stressors, reality does not follow a simple stimulus-response pattern but includes various mediation processes and feedback loops. Accordingly, it is difficult to relate one demand (external stimulus) to a specific strain (individual response). In light of the interdependency of demands and resources and the individual’s coping ability and personal needs, the same situation can result in positive or negative stress (Ulich & Wülser 2014).

Stressor	Description / Examples
Task related stressors	Time pressure, monotony, high complexity, interruptions
Work-related stressors	Shift work, overtime, on-call work
Social stressors	Social interactions with superiors, employees, customers, conflicts, bullying, aggression in the workplace, lack of feedback
Role-related stressors	Role overload (too much, too complicated), role conflict (conflicting expectations, conflict with my personal values), role ambiguity (unclear expectations)
Career-related stressors	Underemployment, lack of career opportunities, job insecurity
Organisational change	Introduction of new technologies, company merger
Physical stressors	Physical working conditions such as noise, dirt, heat, chemical or toxic substances, tiring and painful positions, carrying or moving heavy loads
Traumatic stressors	Accidents, very dangerous activities
Work life balance	Interface of work and home; working hours do not fit in with family and social commitments outside work

Table 2: Potential stressors in the context of work (Igic et al. 2014; OECD 2013; Ulich and Wülser 2014)

Even though stress is subjective and mediated by the individual evaluation of a situation, there are nevertheless a number of substantive factors that require sustained physical and psychological efforts and hence can be identified as ‘potential job-related stressors’ (see table 2).

Similarly, it is also possible to detect a group of job resources that “may be used to prevent the occurrence of stress, mitigate the severity or reduce the effect of stress” (Zapf & Semmer 2004, p. 1042f.). They can be differentiated between internal (personal) resources and external (situational) resources. Table 3 summarises the job characteristics (external resources), which can positively influence the stress experience at work.

An important moderator between job resources and job demands is the so-called ‘sense of coherence’. It is a construct of the three factors comprehensibility, manageability and meaningfulness (see table 3). “Individuals with a high sense of coherence appraise fewer demands as stressors, they are more flexible in choosing from their resources, react more confidently and determined to a problem and evaluate the success of their action more adequately” (Bauer & Jenny 2007, p. 224). The sense of coherence related to work can be used as a general indicator for the salutogenic quality of an organisational system (Bauer & Jenny 2007).

Comprehensibility	Transparency / Task clarity
	Information and communication opportunities
	‘Wholeness’ of tasks / task identity
Manageability	Participation
	Job autonomy / latitude of decision, control, action and temporal flexibility
	Feedback
	Cooperation
	Social support
	Management support
Meaningfulness	Alternation of tasks
	Diversity of requirements
	Learning opportunities
	Career development prospects
	Meaningfulness and relevance of work

Table 3: Job characteristics with beneficial effects on personal resources (Ilgic et al. 2014; OECD 2013; Ulich & Wülser 2014; Bauer & Jenny 2007)

Comparing the work-related demands (table 2) and resources (table 3), it becomes clear that they refer directly or indirectly to the same job characteristics that affect the quality of working life (table 1). Hence, the question occurs which practices utilise these job characteristics to result in better health or quality of working life respectively.

Generally, all work designs that embrace the *socio-technical system approach* are likely to improve organisational performance and health and well-being. Such approaches (see table 4) try to optimise the interdependency of technical equipment, work organisation and human capital (Eeckelaert et al. 2012; see also Dortmund / Brussels position paper on workplace innovation 2012). The features in table 4 refer to the factors constituting the sense of coherence (compare table 3).

Principles	Features	Assumed effects
1. Forming independent organisational entities which can work on the whole of a task	• Wholeness	• Experiencing the relevance and significance of their job activity
	• Diversity of requirements	• Using diverse skills and knowledge • Avoiding one-sided strains
2. Ensuring coherence of the tasks within the organisational entity in order to create awareness of the common task and foster team support	• Social interaction	• Tackling challenges together • Mutual support helps to better bear strains
	• Job autonomy	• Reinforcing self-esteem and readiness to take over responsibility • Experiencing influence on and meaning in work process
3. Ensuring the entity of product and organisation so that the result of the work can be qualitatively and quantitatively related to the team	• Opportunities of learning and skill development	• Ensuring mental flexibility • Developing professional competencies
	• Time flexibility and control	• Avoiding inappropriate workload • Providing room for manoeuvre and space for stress-free reflection
	• Meaningfulness	• Creating experience of contributing to socially beneficial products • Ensuring consistency between individual and societal interests

Table 4: Principles, features and effects of socio-technical systems (Ulich & Wülser 2014)

Considering that workplace innovation and workplace health management share elements and processes that lead to the same or similar results, it is to clarify how the two concepts can be distinguished.

Shared common ground – clarifying the overlap

When appraising the shared common ground between workplace innovation and workplace health management, it is important to bear in mind that the area of interest leads to a specific research focus. The object of investigation is the overlap between workplace health management and workplace innovation with a hybrid primary focus on concurrent results of better organisational performance and quality of working life. This specific perspective is helpful. It increases the overlap of the two concepts in order to broadly elaborate what workplace innovation and workplace health management have in common.

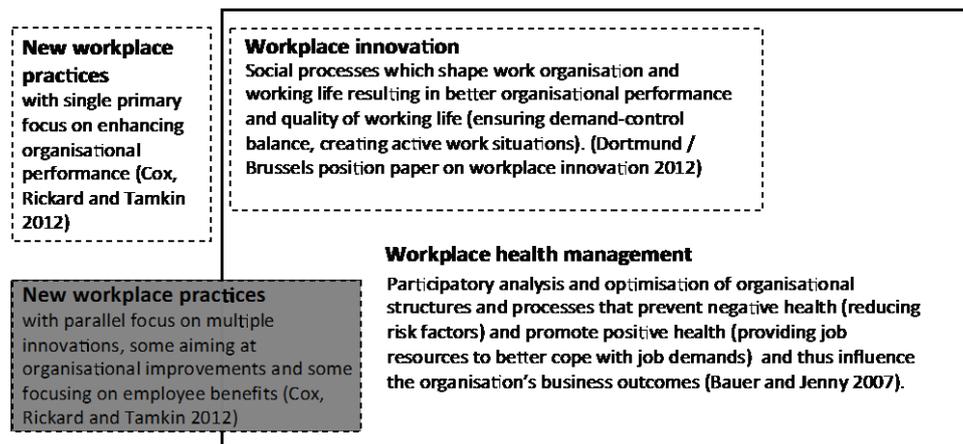


Figure 3: Common ground between workplace innovation and workplace health management (own visualisation)

As a consequence of the chosen definition, all workplace innovation of hybrid primary focus contributes to workplace health management (see figure 3). In particular, when looking into quality of working life (see table 1), it becomes clear that this aspect of workplace innovation entirely overlaps with the salutogenic approach of workplace health management (see table 2 and 3). Health and well-being are not only essential elements of the quality of working life. The job features that facilitate the improvement of quality of working life are also resources for improving the salutogenic quality of an organisational system (Bauer & Jenny 2007). Moreover, the demand-resource balance is a fundamental mechanism affecting positive *and* negative stress at work (Demerouti et al. 2001).

As Eeckelaert et al. (2012, p. 32) conclude, “occupational health and workplace innovation cannot easily be distinguished conceptually in a model”. In this regard, it has to be considered that practices of workplace health management can be categorised whether they are explicitly or implicitly associated with health (Bauer & Jenny 2007). Accordingly, implicit salutogenic practices to change the work environment (e.g. personnel management, organisational development, technical and environmental design) are strongly relevant to health, but commonly not linked to it by executives and staff. For example, incentive schemes are relevant to workplace innovation (Kesselring, Blasy & Scopetta 2014) but seem less relevant to workplace health management. However, according to the effort-reward imbalance (ERI) model, workers’ rewards in form of earnings, esteem, promotion prospects and job security are related to job stress (Siegrist 2002).

Despite this difficulty of clearly distinguishing the two concepts, the schematic diagram in figure 4 might contribute to the further conceptual differentiation. For example, figure 4 helps clarifying that common elements fulfil different functionalities within workplace innovation and workplace health management.

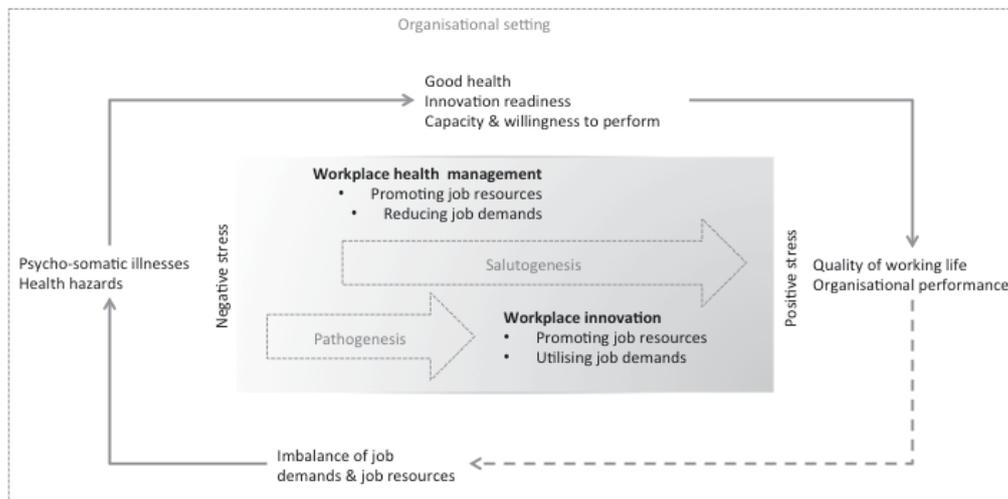


Figure 4: Relationship between workplace innovation of hybrid primary focus and workplace health management (own visualisation)

First, good health and the capacity and willingness to perform and innovate are essential enablers for workplace innovation (see figure 4). These elements are at the same time objectives of workplace health management. In particular, pathogenic health management practices aim at preventing health hazards and illnesses at work and hence, are a precondition to workplace innovation (Kesselring, Blasy & Scoppetta 2014).

However, a workplace health management goes beyond pathogenesis. It does not only aim at reducing job demands, but also at promoting job resources which help to cope with job demands to reduce strains at work (negative stress) (Bauer & Jenny 2007). At this stage, workplace health management starts overlapping with workplace innovation because the elements and processes that help to balance the job demands and job resources are also relevant for activation and motivation (positive stress) (Demerouti et al. 2001).

In this respect, the demand-control-support-model predicts that high psychological demand, decision latitude and social support result in activation. Though, it cannot specify the exact mix of demands and resources that leads successfully to this outcome. The interaction of job resources and job demands is complex. It is mediated by many factors; it does not follow a linear chain of effect and is evaluated subjectively (Ulich & Wülser 2014). As a consequence, it is difficult to differentiate the two concepts at this stage where workplace health management and workplace innovation of primary hybrid focus encompass the salutogenic approach to reach their goals.

Nevertheless, there is a difference in the emphasis of the two goals of organisational performance and quality of working life. The objective of workplace health management is to positively affect: directly or indirectly, the employees' health, which then influences the organisational business outcomes. In consequence, its

objective is to promote job resources and to reduce job demands as much as possible. Of course, if applied in a market-oriented enterprise, workplace health management has to take into account the commercial imperative of the organisation. Therefore, it cannot reduce job demands to zero and it does not have the means to promote all job resources possible. Nevertheless, workplace health management has the overall objective to (re-)establish the equilibrium of the cognitive-emotional-environmental system ('sense of coherence') at work, which has a positive impact on the organisational performance (Bauer & Jenny 2007).

On the other hand, workplace innovation aims at positive stress in form of active jobs for promoting motivation, learning or change (Dortmund / Brussels position paper on workplace innovation 2012). Yet, there is no universal recipe to successfully enhance at the same time both, organisational performance and quality of working life. Particularly, quality of working life is a fragile construct depending on work organisation, working conditions, managerial choices and individual evaluation (Oeij & Wiezer 2002).

From the perspective of workplace health management, the question is hence: How far can workplace innovation push positive stress in order to enhance organisational performance without decreasing quality of working life? In light of the high-strain/low-strain hypothesis (Demerouti et al. 2001), it cannot be excluded that workplace innovation implies the risk of generating an imbalance of demands and resources that leads to negative stress. This risk is visualised by the dashed arrow in figure 4.

Regarding this, it is of interest whether studies can provide empirical evidence which practices related to workplace innovation can lead to simultaneous improvements in organisational performance and quality of working life, particularly in terms of better health and well-being.

Empirical Evidence of the overlap

As aforementioned, the simultaneous occurrence of enhanced quality of working life and organisational performance depends less on the particular elements, but rather on the process of their application. This is why a narrow choice of selection criteria is applied. Only those studies were selected that analyse work practices that comprise a social process with simultaneous (positive or negative) impact on the organisational performance and quality of working life.

Such a narrow search radius avoids combining fragmented evidence of different studies. There are many studies that analyse specific aspects or single outcomes of workplace innovation (e.g. Benders et al. 1999; Flood & Guthrie 2005; Westgaard & Winkel 2011). However, combining results of different studies on single aspects risks to correlate practices of workplace innovation with quality of working life and organisational performance without proof that these practices caused the two outcomes simultaneously (Kesselring, Blasy & Scoppetta 2014).

As a consequence, only four relevant studies were selected which analyse both outcomes concurrently. Besides the small number of studies, it has to be considered that the selected studies clearly differ in sample size, data-collection method and operationalization of the selection criteria. The studies of Ramstad (2009, 2014) and Wood (2008) provide valuable findings based on broad data. Both authors analyse

large data samples (one from the Finnish Workplace Development Programme and the other from the UK's Workplace Employee Relations Survey). Jenny et al. (2011) evaluated a stress intervention programme in eight Swiss organisations. These differences between the selected studies have to be taken into account when comparing the findings and drawing conclusion. It cannot be expected that the reviewed data will be sufficient to draw general conclusions about the subject of interest. However, the findings can provide points of reference how the two concepts could reinforce each other.

In light of the research focus, the review of the selected studies aims first at finding empirical evidence that workplace innovation of primary hybrid focus is possible. The second objective is to clarify which measures of work organisation facilitate the concurrent outcomes.

With regard to the question whether workplace innovation of primary hybrid focus is possible, the findings do not present a uniform picture. Ramstad (2009) concludes that performance and the quality of working life can be improved simultaneously by using the same workplace practices. The data from her study of 2014 confirm her conclusions of 2009. Similarly, Jenny et al. (2011) give evidence that participatory and systematic stress management interventions can shape work organisation and culture while having a positive impact on both the organisational performance and the well-being of the employees.

On the other hand, Wood (2008) draws a more differentiated conclusion. According to his study, work practices related to workplace innovation such as high involvement management does not lead to simultaneous outcomes. Practices of high involvement management are positively associated with labour productivity, but not with other outcomes. This is why Wood (2008, p. 11) states that "the results suggest that both the mutual gains and the conflict models are relevant as the mutual gains model fits work enrichment, and the conflict model is more applicable to high involvement management: it appears to have benefits for shareholders and managers but may have costs for workers in the form of increased anxiety".

The overview in table 5 shows which elements and processes are promising for achieving simultaneous outcomes in terms of organisational performance and quality of working life. However, it also shows that there is no one right solution towards simultaneous outcomes. The same elements do not always result in mutual gains. Ramstad (2009) notes that she could not generalise any rule of application of particular elements or processes. It rather seems that the combinations vary from workplace to workplace depending on the needs and past development.

	Ramstad 2009	Ramstad 2014	Jenny et al. 2011	Wood 2008
Analysed Practices	<ul style="list-style-type: none"> - Collaboration - Involvement - Participation 	<ul style="list-style-type: none"> - Participation - Decentralized decision making - Supervisor support - Competence development - Internal collaboration - External cooperation 	<ul style="list-style-type: none"> - Employee survey - Management trainings - Stress-management courses for employees - Team workshops to elaborate solutions to the challenges of stress 	<ul style="list-style-type: none"> - Teamwork - Flexible job descriptions - Idea-capturing schemes - Competence development - Involvement
Success factors	<p><i>Affirmative outcomes:</i> It was not possible to separate any clear clustering between the various practices resulting in mutual gains. However, a variety of practices are promising like</p> <ul style="list-style-type: none"> - Teamwork - Leadership - Working capacity - Coping capacity - Pay - Customer service - Quality systems - External networking - Practices related to ageing workers 	<p><i>Affirmative outcomes:</i> Positively associated with simultaneous improvements are</p> <ul style="list-style-type: none"> - Decentralized decision-making - Employee competence - Internal and external cooperation 	<p><i>Affirmative outcomes:</i> Positively associated with simultaneous improvements are</p> <ul style="list-style-type: none"> - Collaboration - Motivation - Will for change - Commitment of management - Corporate culture 	<p><i>Conflicting outcomes:</i> -Only work enrichment is positively linked to mutual gains</p>

Table 5: Empirical evidence for success factors to achieve mutual gains

For example, teamwork seems to be a promising practice with regard to simultaneous outcomes. However, Ramstad (2009) warns that the introduction of teamwork does not necessarily improve productivity unless it is supported by a related management and incentive system. The lack of supportive management practices might be an explanation why Wood (2008) could not find any correlation between team work and mutual gains. Similarly, Jenny et al. (2011) refers to the internal context (e.g. motivation, commitment of management and corporate culture) as decisive success factors for the stress intervention programme resulting in both outcomes.

With respect to the nature of the method of implementation, Ramstad's second study (2014) shows that different practices have to be applied at different stages of a project in order to achieve organisational performance and quality of working life at the same time. According to her findings, simultaneous improvements in productivity and the quality of working life are related to active employee and middle management participation in the planning and implementation phase of a project, close internal collaboration and specific competences during the project work.

Moreover, the external context seems to be influential, too. For example, Ramstad (2014) mentions that external collaboration (e.g. methods used by external expert and external networking) is positively associated with simultaneous improvements. This goes in line with Huzzard's (2003) conclusion that the external context in terms of labour market and labour law sets a specific scene which can have favourable effects on the experience of the quality of working life inside an organisation.

In addition to the context, the time of data collection could also influence the findings. For example, Jenny et al. (2012) stated that the evaluated interventions showed success especially when looking at the long-term perspective. For example, some measures led to a positive return on investment only after four years. Similarly, Ramstad (2009, 2014) analysed data from longitudinal studies and found mutual gains. On the other hand, Wood (2008) analysed data from the year 2004 only. However, this is an assumption that needs further research with respect to how the period of observation might affect the findings on positive simultaneous outcomes.

With regard to the operationalization of the simultaneous outcomes, it does not seem possible to find any manifest differences between the studies. Wood (2008) and Ramstad (2009, 2014) considered multidimensional measures for organisational performance and quality of working life. Jenny et al. (2011) only looked at labour productivity in terms of organisational performance but also applied a complex operationalization of quality of working life. Consequently, it cannot not be specified which kind of organisational performance or which aspect of quality of working life is most likely to be affected by practices related to workplace innovation.

Finally, the conflicting findings of Wood (2008) might be a confirmation of the aforementioned theoretical explanation that workplace innovation risks to lead to an imbalance of job demands and job resources that can produce detrimental effects on the quality of working life of employees (see dashed arrow in figure 4). Accordingly, high involvement management increased the levels of anxiety (Wood 2008). In light of his findings, Wood (2008, p. 12) hypothesise that high involvement management entails pressures to improve employees' performance that may raise their concerns about their competencies. Such questioning may reduce employees' self-efficacy, psychological and economic security, as high involvement management may be perceived as carrying the threat that jobs are at risk, if workers do not improve their performance. It may also be the case that it increases role ambiguity.

To sum-up, the study review provides empirical evidence that there are work practices that can concurrently result in enhanced organisational performance and quality of working life. The conflicting results however indicate that it is not about a simple combination of the same elements. The nature of the implementation processes plays a decisive role in successfully improving both outcomes. The key success factor seems to be less about the *what* (which solution) but the *how* (concept-driven within a participative and managerial anchorage). Moreover, external factors affect the outcomes, too.

In other words, the complexity and interdependency at different levels make it difficult to define which elements and processes have to be selected, combined and applied in order to achieve both results. Nevertheless, the empirical findings help identifying opportunities of how the two concepts could reinforce each other.

Conclusion

Workplace health management does not only provide healthy employees. By its salutogenic measures, workplace health management establishes processes and resources that are a corner stone of workplace innovation aiming at concurrent results of improved organisational performance and better quality of working life.

In light of the shared common ground, there are several opportunities where initiatives of workplace innovation can tap into existing resources that are explicitly or implicitly linked to the field of workplace health management.

Join forces to build a salutogenic organisational culture

Workplace health management implements salutogenic measures to create a sense of coherence with beneficial effects on the individual experience of quality of working life and hence, the organisational performance. For a better leverage of such salutogenic resources while launching initiatives of workplace innovation, organisations should aim at joining expertise, managing and communicating initiatives of the two fields in an integrated manner and looking for opportunities to share external resources:

(1) *Joint expertise.* When starting new initiatives for promoting workplace innovation, those departments who are responsible for health in the workplace can provide useful expertise and proven approaches to implement salutogenic practices at an individual and organisational level. Enterprises that have systematically anchored their workplace health management in the organisation (figure 1) dispose of comprehensive tools for data collection. For example, a so-called cockpit of workplace health management collects data from employee surveys, absence management and personnel management to analyse the salutogenic culture of the organisation (Päper 2015). Such data management can be helpful to assess the specific context of a company before launching an initiative of workplace innovation. According to the reviewed studies, it is decisive to understand the specific situation and culture of a company in order to successfully implement work practises towards better performance and quality of working life (see Ramstad 2009, 2014).

(2) *Integrated management.* A systematic use of such internal resources requires an integrated management of workplace health management and workplace innovation at a strategic level (planning and financing across departmental budgets, linking to overall business objectives and joint evaluation of effectiveness). The reviewed studies conclude that a key success factor for simultaneously improved performance and quality of working life is how such work practices are implemented and managed (concept driven, with supportive management style and corporate culture, participative anchorage). In this respect, workplace health management can support workplace innovation of primary hybrid focus with already existing salutogenic processes. For example, it is often integrated into quality management systems for ensuring the sustainability of such processes (Grutsch & Bürki 2015). However, it has

to be carefully assessed which quality management practice might be suitable to develop and promote workplace innovation (Kim, Kumar & Kumar 2012).

(3) *Integrated communications.* Involvement, motivation and commitment are key success factors for mutual gains (Jenny et al. 2011). Therefore, communication should build on the good arguments of both concepts. Good health and well-being (including implicit and explicit salutogenic practices) can be a valid argument to win the employees' acceptance (incl. workers representative) for impending change projects related to workplace innovation. Moreover, healthy workplaces can strengthen staff retention in terms of better job satisfaction and in form of a company's reputation as part of its employer branding strategy. At the same time, better innovation readiness and organisational performance can help strengthening the position of workplace health management inside the company. For example, the label Friendly Work Space is awarded to organisations in Switzerland which successfully implement workplace health management and hence, make a systematic commitment to ensuring good working conditions for their employees. The communication of the label builds purposefully on the arguments from both, innovation and health management (see Health Promotion Switzerland 2015a).

(4) *Sharing external resources.* Initiatives and projects that occur within the common ground can potentially tap into external resources (funds, networks, platforms, external partners) for innovation management (universities, innovation clusters, national funds etc.) and health promotion (insurances, public health funds, etc.). For example, two innovative projects from the field of workplace health management, such as health promotion in change projects related to new work environments (Windlinger et al. 2014) and prevention tools for strengthening the mental health of apprentices (Amstad, Blum & Blaser 2015) successfully applied for funding from the national commission for technology and innovation of Switzerland.

Besides these synergies, the leverage of the overlap can however comprise risks, too. It has to be considered that by conflating the two concepts, there is a risk of dilution and loss of clear focus and direction. Workplace health management aims at healthy workplaces by balancing job demands and job resources (Ulich & Wülser 2014). On the other hand, workplace innovation aims at combining job demands and job resources towards activation of the employees. As a consequence, there could be a conflict of interest between the two concepts with regards to the use or reduction of job demands in order to achieve the objectives (figure 4).

Provide a recipe book for implementation

As aforementioned, the chosen focus is not yet covered by much empirical research. In order to better understand which practices in what context result in mutual gains, more robust data covering the entire process (work practices related to a social process shaping concurrently organisational performance and quality of working life) are necessary. In this respect, it has to be taken into account that workplace innovation and workplace health management are applied concepts. For a better applicability of both concepts, further research should contribute to the development of an integrated impact model which links – theoretically and empirically – optimisation processes to outputs, outcomes and impact in order to explain how to combine the ingredients for workplace innovation of primary hybrid focus.

Kesselring, Blasy and Scoppetta (2014, p. 20) have structured the process of workplace innovation according to the “input-process-output-outcome-impact scheme used in evaluation studies”. By their approach, it is possible to identify different sets of “organisational structures and capacities or individual capabilities” which fulfil a certain function towards workplace innovation. With regard to the mutual gains however, the layers described by the three authors do not clarify, how to manage the complex, interdependent and hence fragile balance of job demands and job resources towards simultaneous outcomes of better organisational performance and quality of working life.

Considering the overlap of workplace innovation of hybrid focus and workplace innovation, an integrated impact model of workplace innovation suggested could build on already existing organisational health development models (see Jenny et al. 2011). The suggested *recipe book for the successful implementation of workplace innovation* would have to take into the account the specific situation and context of an organisation and give guidance how to proceed step by step. The more such a recipe book is founded on empirical evidence, the better workplace innovation for productive and healthy workplaces can be promoted and applied in organisations.

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