

REVIEWING PSYCHOLOGICAL FACETS OF WORKPLACE INNOVATION

Arianna Costantini

*Department of Human
Sciences, University of Verona,
Italy*

arianna.costantini@apreso.org

Riccardo Sartori

*Department of Human
Sciences, University of Verona,
Italy*

Andrea Ceschi

*Department of Human
Sciences, University of Verona,
Italy*

About the authors

Arianna Costantini is a Ph.D. Candidate in Psychology at Verona University, Department of Human Sciences, Italy. Her field of work is workplace innovation, reward management, and organizational behaviour.

Riccardo Sartori is an assistant professor in work and organizational psychology at Verona University, Department of Human Sciences, Italy. His field of work is organizational innovation and the assessment processes linked to this topic, including psychological assessment and human resources management.

Andrea Ceschi is a post-doc in work and organizational psychology at the Verona University, Department of Human Sciences, Italy. His field of work deals with organizational dynamics related to decision-making processes in the workplace.

Abstract

In this article, we present a review of recent studies on workplace innovation (WPI) from a work and organizational psychology (WOP) perspective, with the aim of showing the potential advantages of taking a WOP perspective on WPI. We first outline a few different conceptualisations of WPI and of its main outcomes, that is, quality of working life and organizational performance. Next, we examine the intersections between research in WOP and WPI, specifically focusing on how an understanding of organizational and work-related dynamics can influence the effectiveness of WPI practices. Third, in an attempt to facilitate the integration of research on WOP and WPI and to disentangle the mechanisms underlying the effective implementation of WPI policies, we present evidence on three critical concepts in WOP and their relationship to WPI: job autonomy, job flexibility and participation in organizational life. Finally, we discuss some practical implications for Work and Organizational Psychologists interested in WPI implementation.

Introduction

The European Workplace Innovation Network (EUWIN) has defined workplace innovation (WPI) as a bundle of practices and programs involving changes in business structure, Human Resources Management (HRM), in the relationships with clients and suppliers, or in the work environment itself. Based on this perspective, WPI is characterised by the improvements it is supposed to beget, such as higher motivation at work, better working conditions for employees, increased labour productivity, innovation capability, market resilience, and overall business competitiveness. That is, according to this definition, all enterprises can benefit from WPI.

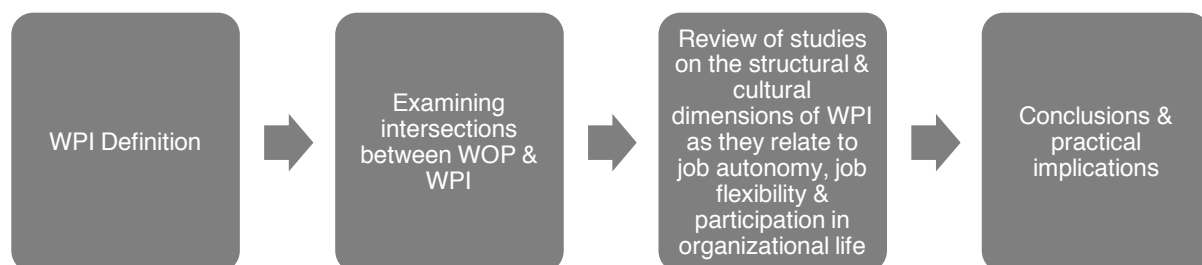
Given these potential benefits of WPI for organizational performance and employee well-being, it is not surprising that WPI has received substantial interest from policy-makers, practitioners and scholars from different fields. Indeed, it has come to be seen as a fundamental factor to

rely on in order to face intensifying global competition and technological advancement (Boxall & Purcell, 2016). In particular, the multidisciplinary perspective to the study of WPI is evidenced in the simultaneous attention to the effects of introduced innovations on individuals (e.g., in terms of motivation, attitudes, engagement), and on the organization as a whole.

However, this multidisciplinary focus on WPI has led to a variety of different conceptualisations based on the framework of study adopted. Even though such a heterogeneous body of literature may be considered important to increase the understanding of WPI as a whole, it can create misunderstandings for practitioners who want to foster WPI inside organizations and need evidence of policy outcomes to rely on when making implementation decisions (Beauregard & Henry, 2009).

In order to deepen our understanding of the effects of innovations in the workplace, a new integration between developments in theoretical and practical knowledge among different disciplines (Dhondt & Van Hootegem, 2015) is needed. In this respect, one area of study, i.e., work and organizational psychology (WOP), can provide important insights to promote a deeper understanding of the factors influencing the effective implementation of WPI because it focuses on employee motivations, attitudes, and cognitions in the workplace. In other words, integrating findings from research in WOP with findings from research on WPI could help us better define the linkages and the mechanisms through which innovations in the workplace affect employees' attitudes and behaviours, as well as organizational performance. In particular, validated theoretical models and evidence from research in the WOP field provide a wide body of knowledge devoted to understanding how individual motivations, attitudes, and behaviours develop and change according to environmental and contextual influences. In turn, this could represent a relevant and valuable contribution to the understanding of WPI. That is, merging findings from studies investigating WPI and research in WOP could significantly advance both the research and the applied agendas regarding the design, implementation, and evaluation of WPI inside organizations.

Figure 1. Overview of the structure of the present contribution



Therefore, this article aims to present an overview of studies on WPI (see Figure 1) with a specific focus on showing how WOP can contribute to this discussion. In order to do so, we will first address the definition of WPI, then we will examine the intersection between WOP and WPI and, subsequently, we will present evidence on three critical concepts in WOP and their relationship to WPI: job autonomy, job flexibility and participation in organizational life. Finally, we will discuss and address practical implications for Work and Organizational Psychologists interested in WPI implementation.

What is WPI: Defining a fuzzy concept

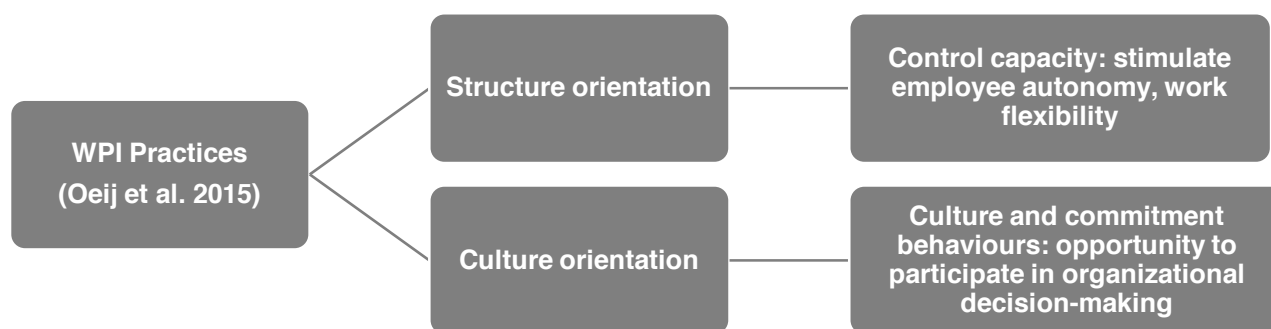
The conceptualisation of WPI has been characterised by definitional variety among both academics and practitioners. Nevertheless, one common feature found across these various

conceptualisations has been a tendency to define WPI in terms of its outcomes, specifically quality of working life and organizational performance (Pot & Koningsveld, 2009). This focus on defining WPI by means of its outcomes rather than by its contents (i.e., practices, policies and initiatives per se), appears tautological because it does not question whether or not and how WPI interventions are indeed effective in fostering better working experiences and higher organizational performance. On the contrary, it merely assumes that innovations have a positive impact on workers and organizations (Boxall & Macky, 2007)¹.

A notable exception to this is the definition of WPI proposed in the report of the Third European Company Survey, which focuses on actual practices, in contrast to expected outcomes of WPI. It defines WPI as a “developed and implemented practice or combination of practices that either structurally (through division of labour) or culturally (in terms of empowerment of staff) enable employees to participate in organizational change and renewal and hence improve the quality of working life and organizational performance” (Oeij et al., 2015).

Paying particular attention to the interventions constituting WPI, this conceptualisation identifies two main types of processes pertaining to the introduction of innovations in the workplace: The former concerns structural changes related to production systems and the design of the organizational model; the latter focuses on social aspects fostering positive work behaviours and attitudes, and promoting higher motivation at work. In this article, we will adopt this particular conceptualisation of WPI (see Figure 2).

Figure 2. Adopted conceptualization of WPI



Even though such a definition is useful to disentangle the different dimensions involved in WPI implementation, it must be noted that the factors constituting both of the proposed dimensions are naturally intertwined, in that institutions are embedded in culture and individuals are embedded in both culture and institutions. That is, the willingness to implement structural changes in the organization is grounded in values and norms, which are elements of the organizational culture. Likewise, implemented practices aimed at developing and fostering a particular vision of the organizational culture need structural support in order to be implemented. Such an understanding of the interdependent nature of organizational culture and structure is crucial, if WPI implementations are to be effective².

That being said, the clear distinction between processes that are related to structure and processes that are related to culture allows researchers to unpack which specific features of WPI may benefit from being investigated within a specific research field rather than within another. In this context, WOP researchers and practitioners could provide important insights in

¹ An in-depth analysis of the several conceptualisations of WPI is out of the scope of the present contribution. For a discussion, see Oeij & Dhondt (2017).

² We wish to thank Marta Strumińska-Kutra for this precious argumentation.

understanding and supporting the culture orientation dimension of WPI, for example, by means of job redesign interventions aiming at fostering positive organizational outcomes, such as work engagement and organizational commitment. On the other hand, scholars and practitioners from other research fields, such as management science and sociology, may have more to contribute to our understanding of the structure orientation dimension of WPI.

However, although useful for describing and defining WPI, the distinction between these two main dimensions represents an artifice. Indeed, the structure and culture orientations are deeply intertwined and result, to different extents, in the aforementioned outcomes: Quality of working life (QWL) and organizational performance (OP).

Despite definitional agreement in identifying QWL and OP as the two main expected outcomes of WPI, very limited attempts have been made to clearly define indicators for QWL and OP. Although QWL is a rather old concept (Davis & Cherns, 1975), there is still debate regarding its nature (Martel & Dupuis, 2006), and no commonly accepted definition has emerged. Studies investigating the QWL-WPI relationship have primarily measured it in terms of organizational commitment or job satisfaction (Dhondt, Pot & Kraan, 2014; Oeij, Dhondt, Kraan, Vergeer, & Pot, 2012). We are unaware of studies investigating how work engagement or work-life balance may be affected by the introduction of WPI. In this respect, taking a WOP perspective on WPI can provide potential advantages because evidence from research in this field offers important explanations of the factors enhancing positive work and organizational attitudes, which constitute important dimensions of QWL.

Intersections between WOP and WPI

It has been argued that, in order to foster the success of proposed innovation policies in the workplace, it is necessary to consider and imagine how the pattern of multiple proposed actions would be linked to the achievement of pursued outcomes (Delery & Doty, 1996). That is, given that a policy aimed at fostering innovation in the workplace is introduced within an already established organization, it is crucial to consider how the whole range of factors already present in the organization could impact the effectiveness of the policy, as well as interact with it.

In this regard, WOP research, in particular theoretical models developed to investigate how organizational design is related to work attitudes and behaviours, could provide a valuable framework for WPI-policy design. In fact, they would provide not only a strong evidence-based approach to policy design but also the opportunity for being tailored to the unique needs of the organization. Accordingly, some WPI literature has already adopted a WOP perspective to the study of organizational design aimed at understanding how it can influence employees' health and QWL.

Current studies have mainly referred to the Job Demand-Control Model (JDC) developed by Karasek (Karasek, 1979; Karasek & Theorell, 1992). The JDC assumes that work organization, and, in particular, high control in performing tasks and activities at work, is a key-factor in transforming job demands into opportunities for learning as opposed to risks and stress drivers (Holman et al., 2012). Although the WOP literature has provided considerable support for the hypothesis that the combination of high job demands and low job control is an important predictor of psychological strain and illness (Schnall, Landsbergis, & Baker, 1994), support for the hypothesis that control can moderate the negative effects of high demands on well-being is less consistent (de Jonge & Kompier, 1997; Van der Doef & Maes, 1999).

Hence, although the JDC might be useful to gain an understanding of the relevance of organizational design on employee well-being and organizational sustainability, support for the model has been relatively mixed. Moreover, within WOP research more recent organizational

models have emerged that factor in a wider range of organizational resources and demands than just job control and work overload (Bakker & Demerouti, 2007). To our knowledge, it appears that the literature on WPI has never established a connection with these more recent models.

The Job Demands-Resources Model (JD-R) (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) could provide an important theoretical basis for the design, implementation and monitoring of WPI practices inside organizations. The JD-R assumes that, whereas every occupation may have its own specific risk factors associated with job stress, these factors can be clustered into two broad categories, i.e., job demands and job resources. Hence, it goes beyond the limits of the JDC, which basically considers only a limited amount of the several factors influencing employees' work outcomes (i.e., work overload, time pressure, and job control) and may be applied to several occupational settings, irrespective of specific professional demands and resources (Bakker & Demerouti, 2007).

Job demands refer to organizational features requiring employee physical and psychological effort that can result in psychological stress, whilst job resources refer to all those elements in the work environment that help individuals achieve their goals, stimulate personal growth and reduce job demands by facing them. In addition, the JD-R posits that two different, underlying psychological processes play a role in the development of negative (job strain) and positive work outcomes. Specifically, it argues that chronic job demands lead to employees' feelings of exhaustion whilst job resources have a motivational potential that foster higher work engagement, individual performance, and work motivation.

Research on the JD-R has found strong empirical support for the idea that job demands are predictors of negative work outcomes such as burnout and exhaustion, whilst job resources have been found to predict higher levels of work engagement, extra-role performance, organizational commitment, and lower absence duration (Bakker, Demerouti, & Verbeke, 2004; Bakker, Demerouti, de Boer, & Schaufeli, 2003; Bakker, Demerouti, Taris, Schaufeli, & Schreurs, 2003; Schaufeli & Bakker, 2004). Moreover, there is evidence that job resources have positive effects on the relationship between job demands and well-being. Specifically, studies have shown that higher autonomy, feedback, perceived social support, and a high-quality relationship with the supervisor can buffer the negative effects of work overload, emotional and physical demands, and work-home interference (Bakker, Demerouti, & Euwema, 2005).

These results suggest that the JD-R could represent an important tool for policy-makers and WOP professionals who want to foster WPI inside organizations, because it provides a clear framework for the implementation of innovations in the workplace. Besides providing an evidence-based account for understanding the relationships between resources, demands and work and organizational outcomes, this model provides a paradigmatic approach to the study of organizational variables that influence employees' attitudes and behaviours when introducing WPI. For example, it can represent a reliable means to identify which organizational resources are in specific need of innovations, or, what job demands need to be rethought in order to render them challenging rather than exhausting.

Further, a focus on the positive outcomes related to high job resources permits to shed light on the nature of QWL, which, as previously mentioned, remains a debated concept in need of further clarification. In this respect, applying the JD-R to the study of several organizations operating in a wide range of sectors provided evidence of effects deriving from the demands-resources relationship that are relevant to both QWL and OP. For what concerns the former, the study of organizations through the lens of the JD-R shows that job resources represent one

of the most important drivers of work engagement (Bakker & Demerouti, 2008), which is defined as a positive, fulfilling, work-related state of mind characterised by vigour, dedication, and absorption (Schaufeli, Salanova, González-Romá, & Bakker, 2002). Moreover, studies have found that engaged employees have high levels of energy, are enthusiastic about their work and are often fully immersed in it (May, Gilson, & Harter, 2004).

Given that QWL constitutes a relatively vague concept related to the well-being of workers, work engagement seems to be a more concrete concept that could constitute one core-dimension of QWL. In addition, work engagement may also potentially affect OP. For instance, research investigating the link between work-engagement and OP, despite the substantial heterogeneity in the way in which performance was measured and conceptualised, found support for the higher engagement-higher performance link (Demerouti & Bakker, 2006; Salanova, Agut, & Peiró, 2005; Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

Given the above research evidence from a JD-R perspective and given that QWL and OP are defined as the two major outcomes of WPI, the JD-R framework appears to be an effective approach to promote WPI practices that foster high QWL and, subsequently, higher OP. Moreover, since policies aiming to foster work engagement must be well-integrated and connected in order to be effective (Gruman & Saks, 2011), investigating ways to promote WPI through the JD-R may be effective in not only designing innovative policies aimed at improving job resources but also at harmonising job demands and resources, thereby, promoting higher QWL and OP.

In an attempt to facilitate the integration of research on WOP and WPI and to disentangle the mechanisms underlying the effective implementation of WPI policies, in the following section, we present evidence from research on three main concepts and their relationship to WPI: job autonomy, job flexibility and participation in organizational life. Specifically, based on our adopted definition of WPI (see Figure 2) we will discuss job autonomy and job flexibility as they relate to the WPI-structure orientation and participation in organizational life as it relates to the WPI-culture orientation.

Method

The rationale for sampling the concepts of job autonomy, job flexibility and participation in organizational life was inspired by the definition of WPI as consisting of a structure and a culture orientation. Nevertheless, as previously stated, it must be noted that such a theoretical distinction represents an artifice when it comes to actual practices in organizations. However, assuming this distinction for research purposes helps us understand how interventions specifically aimed at changing organizational design or organizational climate could have an effect on QWL and/or OP.

Peer-reviewed publications on WPI of the last two decades were identified via a computer-based search (i.e., PsycINFO, Web of Science, Google Scholar database). Based on the definitional distinction proposed in the Third European Company Survey we searched for the main psychological constructs related to the cultural and structural dimensions of WPI in relation to job autonomy, job flexibility and participation in organizational life. Specifically, we used the following keywords in relation to job autonomy, job flexibility and participation in organizational life (i.e., by using “and” as a search option): WPI, workplace innovation, quality of working life, high-involvement work systems, organizational innovation, high performance work systems, strategic human resource management, HPWS, organizational climate. In order to be focused on a transcultural level of analysis, we decided to include only English language

sources in our search. Moreover, the keywords were supposed to appear in the title and/or in the abstract.

We acknowledge that these inclusion/exclusion criteria have excluded a large body of WOP research on the three core-constructs considered here (i.e., job autonomy, job flexibility, and participation in organizational life). However, this contribution aims at introducing a link between WPI and WOP focusing on the current state of the art in WPI research. Such an approach aims at fostering future investigations that focus on understanding how WOP could enrich WPI, and, thereby, prompting future more exhaustive contributions of WOP to WPI.

Table 1. Overview of studies included in the review specifying the relationships among the different dimensions of WPI and QWL and OP

References	Methodology		WPI Dimensions			Measured outcomes	
			WPI-Structure		WPI-Culture	QWL	OP
	Quantitative	Qualitative	Job Autonomy	Job Flexibility	Participation		
<i>Bond & Flaxman, 2006</i>	X		X				+
<i>Dhondt et al., 2014</i>	X		X		X	+	
<i>Holman et al., 2009</i>	X		X				+
<i>Humphrey et al., 2007</i>	X		X			+	+
<i>Oeij & Vaas, 2016</i>	X			X			+
<i>Oeij et al., 2012</i>	X		X	X		+	+
<i>Oeij et al., 2014</i>	X	X	X	X	X	+	+
<i>Oeij et al., 2015</i>		X	X	X	X	+	+
<i>Parker et al., 1997</i>	X		X				+
<i>Preenen et al., 2015</i>	X			X			+
<i>Preenen et al., 2016</i>	X		X				+
<i>Taris et al., 2003</i>	X		X				+
<i>Zhou et al., 2011</i>	X			X			+

Note. QWL = Quality of Working Life; OP = Organizational Performance; + = Positive relationships found

Regarding the papers eventually considered for the analysis (13; see Table 1), it appears that the majority of the identified WPI studies were published in journals in the fields of economics, management, and sociology, with limited references to journals in the field of applied psychology. This limited number of identified articles is most likely due to our adoption of the definition of WPI as constituted by two main dimensions and the three specific constructs under investigation, which could also be interpreted as a signal of the need for more definitional clarity in the field of WPI.

Results

Based on our adopted definition of WPI (see Figure 2), we will divide the rest of the review into two main sections. The first part presents studies related to the structural orientation of WPI that investigate how different means to promote employees' control capacity and job flexibility may foster higher QWL and OP. Specifically we will focus on the role played by job autonomy and job flexibility. The second part presents studies related to the cultural orientation of WPI that investigate how the promotion of employees' participation inside organizations, such as by means of participation in organizational decision-making, supports the achievement of a better QWL and improved OP.

The structure orientation of WPI: Enabling control capacity and flexibility

Job Autonomy

Job autonomy is defined as the amount of discretion employees have to carry out tasks, to establish methods of work and the speed or rate of it (Hackman & Oldham, 1976; Oldham, Hackman, & Pearce, 1976). Overall, the positive effects of job autonomy on employee well-being, motivation (Karasek, 1979; Parker, 2003; Singh, 2000), and performance have been found to lead to positive organizational outcomes, especially when combined with other organizational practices (Appelbaum, Bailey, Berg, & Kalleberg, 2000). Below, a selected number of studies will be reported that provide an overview of findings regarding the relationship between job autonomy and organizational outcomes in terms of QWL and OP.

Preenen, Oeij, Dhondt, Kraan, and Jansen (2016) investigated the relationship between employees' job autonomy, self-reported company performance (in terms of revenue and profit), and the moderating role of company maturity among 3311 companies in The Netherlands. They found a main effect for the job autonomy-company revenue relationship. In addition, they found that company maturity moderated the job autonomy-organizational performance link. Specifically, job autonomy was positively associated with employees' perception of company revenue and profit growth, but only for young companies, aged two to five years. Such a moderating role of company age is of interest given that, generally, job autonomy is hypothesised to be positively related to organizational outcomes, regardless of the company's maturity. Overall, these findings support the assumption that job autonomy is a key feature to foster positive perceptions of a company's growth (Preenen et al., 2016).

In another study among 2359 call centres in 16 countries, Holman, Frenkel, Sørensen, and Wood (2009) explored how decisions about work design affect organizational outcomes. They found empirical evidence that job autonomy was negatively associated with voluntary turnover and labour costs, indicating that higher job autonomy enabled employees to better manage and cope with task demands.

Regarding the relationship between job autonomy and indicators of QWL, such as active learning behaviours and higher involvement within the work environment, a longitudinal study conducted within the JDC framework among 876 teachers found a positive effect of job

autonomy in promoting high levels of learning (Taris, Kompier, De Lange, Schaufeli, & Schreurs, 2003). This finding is in line with arguments made by Parker, Wall, and Jackson (1997) whereby job autonomy seems to be a mechanism allowing hands-on learning which gives employees the opportunity to interact with their environment and, at the same time, become more involved in and more knowledgeable about it. Moreover, as noted by the authors, such experience might then potentially lead to a broader ownership of problems and a more proactive view of performance, interpreted, for example, in terms of the learning process itself (Parker et al., 1997).

In another longitudinal study among call centre workers in the UK, job control, along with individual psychological flexibility and the interaction between these two factors was shown to predict people's ability to learn a new ITC application, employees' mental health and job performance (Bond & Flaxman, 2006).

Overall, research evidence suggests that autonomy, beyond fostering job satisfaction and well-being, could also enhance performance, for example, by enabling quicker responses to problems, due to a more developed understanding of roles (Parker et al., 1997). Finally, job autonomy appears to be an essential element in allowing workers to establish how to pursue their goals and to redefine or optimise paths toward goal accomplishment (Humphrey, Nahrgang, & Morgeson, 2007).

Job Flexibility

Defining flexible work as a dimension of WPI directed at optimising personnel availability, Oei and Vaas (2016) investigated the role of WPI on perceived organizational performance and on sickness absence. In this study, WPI was conceptualised as a special capacity of the organization consisting of four sources (i.e., strategic orientation, smarter organising, flexible working, and product market improvement). Using data collected from a sample of Dutch for-profit and non-profit organizations, they found that, among all sources considered, flexible work and organising smarter were those that contributed the least to perceived organizational performance. As an explanation for this surprising finding, the authors suggest that externally oriented resources, such as strategic-orientation and product-market improvement, might be more visible to employees than their counterparts, i.e., flexible work and organising smarter. This availability bias, in turn, could lead to an overestimation of the effects of the externally oriented sources and an underestimation of the effects of the internal sources on performance. Overall, even though reporting a weak effect of flexible work on OP, this study represents an important contribution to the understanding of WPI due to its focus on the differential effects of various sources. Such an approach permits to investigate how different dimensions of WPI do or do not contribute to expected organizational outcomes, i.e., QWL and OP. Moreover, this study found that organizations that are more active with WPI reported higher perceived organizational performance than organizations less active with WPI. In addition, this relationship was strongest for organizations that were active on more than one of the cited resources simultaneously, confirming the importance of taking a systemic approach to the introduction of WPI.

In another study, using longitudinal firm-level data, Zhou, Dekker, and Kleinknecht (2011) investigated the role of flexibility on innovation. Specifically, they found that functional flexibility (i.e., the ability of firms to reallocate labour in their internal labour markets, by relying on training that allows personnel to carry out a wider range of tasks) was positively associated with innovation by reducing barriers to knowledge sharing and allowing the building of multiple competencies among employees (Zhou, Dekker, & Kleinknecht, 2011), which may represent elements for improving QWL.

Focusing on internal labour flexibility practices (ILFPs), which reflect the measures that companies take to help their employees in flexibly performing different tasks and roles in their organization, Preenen, Vergeer, Kraan, and Dhondt (2015) investigated the relationships between these and labour productivity and innovation performance at the company level, in two studies, conducted among 4648 companies in The Netherlands. Results showed that ILFPs stimulate labour productivity and company innovation as reported by directors or HR managers.

Taken together, these findings support the value of a deeper investigation of how flexible policies may represent a resource for companies in adjusting to constant dynamic circumstances, by stimulating innovative and creative behaviour along with other positive organizational outcomes such as commitment, learning and knowledge sharing (Preenen et al., 2015), which may constitute dimensions of QWL.

The cultural orientation of WPI: The role of participation in organizational life in promoting commitment behaviours

Workplace participation, usually defined as the degree to which employees influence decision-making in organizations, is recognised as one of the major drivers of positive outcomes for organizations, such as generic organizational efficiency and workers' well-being and health (Knudsen, Busck, & Lind, 2011).

Studies carried out to investigate the role of participation in the workplace identified different ways in which it can be exercised, such as by individual employees, teams and by employee representatives (Hagen & Trygstad, 2009; Walters & Nichols, 2007). Nowadays, organizations need to find a more dynamic way of conceptualising workplace participation in terms of new job configurations, so as to be able to face the needs and challenges posed by new work and career patterns. That is, more recent HRM practices developed on the basis of the current trends in WOP research tend to promote organizational innovations fostering bottom-up approaches to deal with the needs of the current workforce (Demerouti, 2015), which, in turn, improve working conditions by means of higher job control. This type of approach is necessarily based on higher employee participation in organizational life, since individuals are encouraged to adjust their work environment in order to promote and achieve higher QWL and OP.

Knudsen et al. (2011) explored whether employee participation influenced the quality of the work environment and worker well-being at 11 Danish workplaces. Findings from interviews with employees and managers and from questionnaires administered to employees revealed that only democratically governed workplaces led to the experience of a high quality of the psychosocial work environment among employees. Nevertheless, this study also suggests that, when control systems in the workplace systematically demand more from employees than what they can deliver, participation cannot buffer the negative effects of the control system on employees' psychosocial well-being (Busck, Knudsen, & Lind, 2010). These findings suggest that there is a need to consider the level of job control to allow for the positive effects of participation to emerge.

In addition, the role of organizational level decision latitude on organizational commitment, which may represent a facet of QWL, has been investigated in a study among 2048 employees from six different European countries. Using data from the European Working Condition Survey of 2010, Dhondt et al. (2014) found empirical evidence that among the three different dimensions of job control, i.e., job autonomy, functional support and organizational level decision latitude (OLDL), job autonomy is related to subjective well-being only in combination with OLDL. This suggests that organizations would need to consider all three dimensions in order to foster QWL. Moreover, they also found that functional support and OLDL are related to

organizational commitment more strongly than job autonomy, and that organizational commitment was highest when all three dimensions were present at the same time (Dhondt et al., 2014). That is, to enhance organizational commitment and well-being, which represent two dimensions of QWL, the different dimensions of job control should be aligned and promoted congruently.

Conclusions

This contribution aimed at proposing a conceptual integration of the domains of WPI and WOP, in order to deepen our understanding of the potential advantages offered by such an integrative perspective to innovation in organizations. Drawing on the conceptualisation of WPI as composed of two dimensions, i.e., a structural and a cultural orientation, we identified three main constructs that represent organizational practices at the basis of WPI interventions: job autonomy and job flexibility (i.e., the structural orientation of WPI), and participation in organizational life (i.e., the cultural dimension of WPI).

According to Klein, Conn, and Sorra (2001), a strong climate for innovation implementation, created by the support of management through a clear and strategic vision for it, represents a fundamental factor in order to create an institutional context informing employees that implementation of innovation is important and even rewarded (Choi & Chang, 2009). This reasoning is aligned with the vision of an innovation environment where institutions, organizational cultures and individuals are intertwined and reciprocally influence each other. That is, it suggests that higher QWL and OP are simultaneously achievable when all these different levels of analysis are considered as potential factors influencing the introduced innovations. Based on these premises, the first practical issue to be addressed when designing WPI interventions refers to the creation of a supportive implementation context in which management support and encouragement toward innovation can foster employees' positive beliefs in this regard (Purvis, Sambamurthy, & Zmud, 2001; Russell & Hoag, 2004). In achieving this, the contribution of WOP research is particularly relevant.

To conclude, evidence from research reported in the cited studies shows the intertwined nature of organizational factors in promoting higher QWL and OP. Indeed, it supports the need to simultaneously consider a multitude of features affecting WPI processes aimed at improving QWL and OP, which, in turn, implies taking a systemic perspective on WPI implementation.

References

- Appelbaum, E., Bailey, T., Berg, P., & Kalleberg, A. L. (2000). *Manufacturing advantage: Why high-performance work systems pay off*. Ithaca, NY: ILR Press.
- Bakker, A. B., & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology, 22*, 309-328.
- Bakker, A. B., & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International, 13*, 209-223.
- Bakker, A. B., Demerouti, E., & Euwema, M. C. (2005). Job resources buffer the impact of job demands on burnout. *Journal of Occupational Health Psychology, 10*, 170-180.
- Bakker, A. B., Demerouti, E., de Boer, E., & Schaufeli, W. B. (2003). Job demands and job resources as predictors of absence duration and frequency. *Journal of Vocational Behavior, 62*, 341-356.
- Bakker, A. B., Demerouti, E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. (2003). A multigroup analysis of the job demands-resources model in four home care organizations. *International Journal of Stress Management, 10*, 16-38.
- Bakker, A., Demerouti, E., & Verbeke, W. (2004). Using the Job Demands-Resources model to predict burnout and performance. *Human Resource Management, 43*, 83-104.
- Beauregard, T. A., & Henry, L. C. (2009). Making the link between work-life balance practices and organizational performance. *Human Resource Management Review, 19*, 9-22.

- Bond, F. W., & Flaxman, P. E. (2006). The ability of psychological flexibility and job control to predict learning, job performance, and mental health. *Journal of Organizational Behavior Management*, *26*, 113-130.
- Boxall, P., & Macky, K. (2007). High-performance work systems and organizational performance: Bridging theory and practice. *Asia Pacific Journal of Human Resources*, *45*, 261-270.
- Boxall, P., & Purcell, J. (2016). *Strategy and Human Resource Management* (4th ed.). Basingstoke: Palgrave Macmillan.
- Busck, O., Knudsen, H., & Lind, J. (2010). The transformation of employee participation: Consequences for the work environment. *Economic and Industrial Democracy*, *31*, 285-305.
- Choi, J. N., & Chang, J. Y. (2009). Innovation implementation in the public sector: An integration of institutional and collective dynamics. *Journal of Applied Psychology*, *94*, 245-253.
- Davis, L. E., & Cherns, A. (1975). *The Quality of Working Life. Problems, Prospects, and the State of the Art*. London: Collier Macmillan Publishers.
- de Jonge, J., & Kompier, M. A. (1997). A critical examination of the demand-control-support model from a work psychological perspective. *International Journal of Stress Management*, *4*, 235-258.
- Delery, J. E., & Doty, D. H. (1996). Modes of theorizing in strategic human resource management: Tests of universalistic, contingency, and configurational performance predictions. *Academy of Management Journal*, *39*, 802-835.
- Demerouti, E. (2015). Design your own job through job crafting. *European Psychologist*, *19*, 237-247.
- Demerouti, E., & Bakker, A. B. (2006). Employee well-being and job performance: Where we stand and where we should go. In J. Houdmont & S. McIntyre (Eds.), *Occupational health psychology: European perspectives on research, education and practice* (Vol. 1, pp. 83-111). Maia: ISMAI Publications.
- Demerouti, E., Bakker, A. B., Nachreiner, F., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology*, *86*, 499-512.
- Dhondt, S., & Van Hoetegem, G. (2015). Reshaping workplaces: Workplace innovation as designed by scientists and practitioners. *European Journal of Workplace Innovation*, *1*, 17-24.
- Dhondt, S., Delano Pot, F., & O. Kraan, K. (2014). The importance of organizational level decision latitude for well-being and organizational commitment. *Team Performance Management*, *20*, 307-327.
- Gruman, J. A., & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, *21*, 123-136.
- Hackman, J. R., & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior & Human Performance*, *16*, 250-279.
- Hagen, I. M., & Trygstad, S. C. (2009). Local flexicurity: Resolving the conflict between direct and representative participation. *Transfer: European Review of Labour and Research*, *15*, 557-577.
- Holman, D., Frenkel, S., Sørensen, O. & Wood, S. (2009). Work design variation and outcomes in call centers: Strategic choice and institutional explanations. *Industrial and Labor Relations Review*, *62*, 510-532.
- Holman, D., Totterdell, P., Axtell, C., Stride, C., Port, R., Svensson, R., & Zibarras, L. (2012). Job design and the employee innovation process: The mediating role of learning strategies. *Journal of Business and Psychology*, *27*, 177-191.
- Humphrey, S. E., Nahrgang, J. D., & Morgeson, F. P. (2007). Integrating motivational, social, and contextual work design features: A meta-analytic summary and theoretical extension of the work design literature. *Journal of Applied Psychology*, *92*, 1332-1356.
- Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, *24*, 285-308.
- Karasek, R. A., & Theorell, T. (1992). *Healthy work, stress, productivity, and the reconstruction of working life*. New York: Basic Books.
- Klein, K. J., Conn, A. B., & Sorra, J. S. (2001). Implementing computerized technology: An organizational analysis. *Journal of Applied Psychology*, *86*, 811-824.
- Knudsen, H., Busck, O., & Lind, J. (2011). Work environment quality: The role of workplace participation and democracy. *Work, Employment & Society*, *25*, 379-396.
- Martel, J.-P., & Dupuis, G. (2006). Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. *Social Indicators Research*, *77*, 333-368.
- May, D. R., Gilson, R. L., & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work. *Journal of Occupational and Organizational*

Psychology, 77, 11-37.

- Oeij, P. R., & Dhondt, S. (forthcoming 2017). On the theory of Workplace Innovation. In P. R. A. Oeij, D. Rus, and F. D. Pot (Eds.) *Workplace Innovation: Theory, Research and Practice*. Volume in the series 'Aligning Perspectives on Health, Safety and Well-Being'. Heidelberg etc.: Springer Publishing Company.
- Oeij, P. R., & Vaas, F. (2016). Effect of workplace innovation on organizational performance and sickness absence. *World Review of Entrepreneurship, Management and Sustainable Development*, 12, 101-129.
- Oeij, P. R., Dhondt, S., Kraan, K., Vergeer, R., & Pot, F. (2012). Workplace innovation and its relations with organizational performance and employee commitment. *LLinE, Lifelong Learning in Europe*, 4.
- Oeij, P., Žiauberyté-Jakštienė, R., Dhondt, S., Corral, A., Totterdill, P., & Preenen, P. (2015). *Workplace innovation in European companies*. Luxembourg: Publication Office of the European Union.
- Oldham, G. R., Hackman, J. R., & Pearce, J. L. (1976). Conditions under which employees respond positively to enriched work. *Journal of Applied Psychology*, 61, 395-403.
- Parker, S. K. (2003). Longitudinal effects of lean production on employee outcomes and the mediating role of work characteristics. *Journal of Applied Psychology*, 88, 620-634.
- Parker, S. K., Wall, T. D., & Jackson, P. R. (1997). "That's not my job": Developing flexible employee work orientations. *Academy of Management Journal*, 40, 899-929.
- Pot, F. D., & Koningsveld, E. A. (2009). Quality of working life and organizational performance-two sides of the same coin? *Scandinavian Journal of Work, Environment & Health*, 35, 421-428.
- Preenen, P. T., Oeij, P. R., Dhondt, S., Kraan, K. O., & Jansen, E. (2016). Why job autonomy matters for young companies' performance: Company maturity as a moderator between job autonomy and company performance. *World Review of Entrepreneurship, Management and Sustainable Development*, 12, 74-100.
- Preenen, P. T., Vergeer, R., Kraan, K., & Dhondt, S. (2015). Labour productivity and innovation performance: The importance of internal labour flexibility practices. *Economic and Industrial Democracy*, 1-23.
- Purvis, R. L., Sambamurthy, V., & Zmud, R. W. (2001). The assimilation of knowledge platforms in organizations: An empirical investigation. *Organization Science*, 12, 117-135.
- Russell, D. M., & Hoag, A. M. (2004). People and information technology in the supply chain: Social and organizational influences on adoption. *International Journal of Physical Distribution & Logistics Management*, 34, 102-122.
- Salanova, M., Agut, S., & Peiró, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90, 1217-1227.
- Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002). The measurement of engagement and burnout: A two sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71-92.
- Schaufeli, W., & Bakker, A. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Behavior*, 25, 293-315.
- Schnall, P., Landsbergis, P., & Baker, D. (1994). Job strain and cardiovascular disease. *Annual Review of Public Health*, 15, 381-411.
- Singh, J. (2000). Performance productivity and quality of frontline employees in service organizations. *Journal of Marketing*, 64, 15-34.
- Taris, T. W., Kompier, M. A., De Lange, A. H., Schaufeli, W. B., & Schreurs, P. J. (2003). Learning new behaviour patterns: A longitudinal test of Karasek's active learning hypothesis among Dutch teachers. *Work & Stress*, 17, 1-20.
- Van der Doef, M., & Maes, S. (1999). The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research. *Work & Stress*, 13, 87-114.
- Walters, D., & Nichols, T. (2007). *Worker representation and workplace health and safety*. Basingstoke: Palgrave Macmillan.
- Xanthopoulou, D., Bakker, A., Demerouti, E., & Schaufeli, W. (2007). How job and personal resources influence work engagement and financial turnover: A diary study in a Greek fast-food company. *International Journal of Stress Management*, 14, 121-141.
- Zhou, H., Dekker, R., & Kleinknecht, A. (2011). Flexible labor and innovation performance: Evidence from longitudinal firm-level data. *Industrial and Corporate Change*, 20, 941-968.