# Who is in control? The effect of employee participation on the quality of the work environment

Presenting Author: Ole Busck

Additional authors: Herman Knudsen and Jens Lind,

O. Busck and H. Knudsen: Aalborg University, Department of Development and Planning Fibigerstraede 13, 9220 Aalborg, Denmark

e-mail: oleb@plan.aau.dk

J. Lind Aalborg University, Department of Sociology,

Kroghstræde 7, 9220 Aalborg, Denmark

#### Introduction

This paper reports on recent Danish research into how employee participation affects the quality of the work environment. The research took its point of departure in the dual expectation that employee participation in general has positive effects on the quality of the work environment (QWE) but that the positive effects in certain organisational contexts may be usurped and even turned into negative effects on the psychosocial work environment. Before presenting the details of the research, the two key concepts of the study, work environment and employee participation are briefly presented.

The term *work* (or *working*) *environment* supplanted *occupational safety and health* in the Scandinavian countries in the 1970s signifying a change from focusing on harmful effects to the individual to possible causes to ill-health in the physical and psychosocial environment of individuals in the workplace. This shift was linked to an interest in a more preventive approach to health and safety issues and to an appreciation of simultaneous exposures as well as long-term exposures of employees at work. The concept includes the psychological and social factors in the workplace, forming the individual's psychosocial work environment, that affect the individual negatively in a psychological way thus hampering well-being and job satisfaction. In the regulation of the work environment at workplaces, however, it has obviously been difficult to draw the line between the realms of employee protection and managerial prerogative. Consequently, the psychosocial work environment has been a theme of discussion and sometimes conflict between management and employees both in the institutionalised co-partite H&S-structure (e.g. safety committees) and in the institutionalised co-partite structure of general relations (e.g. works councils).

Whereas work environment may still be a concept used mainly in a Scandinavian context, employee participation is a term used internationally in studies of business organisations and industrial or employee relations. Nevertheless, it is a concept which acquires several different meanings that we will address in the theoretical part. Here, we shall briefly explain how we have defined the concept and how it is linked to a specific institutional set-up in Denmark. For the purpose of this study, employee participation was defined as all ways in which employees take part in decisions regarding their job and their workplace. It is the prerogative of management to distribute work, assign tasks, hire and fire etc., endowing it with the power to decide in all issues pertaining to the workplace. Management, however, may see an advantage in delegating decision-making powers to lay employees, who will often themselves call for influence. Also, management may be compelled by law or collective bargaining to delegate influence on decisions to employees. Thus, three foundations for employee participation are at hand. One is based on management's delegation of decisionmaking powers to employees. Another one is based on the individual or collective effort of employees to decide by themselves, often referred to as gaining 'voice', and a third is based on rights granted to employees by legislation or collective agreements.

The strength of employee participation is determined by its intensity as well as its scope. Intensity can vary from the mere reception of information from management, over

consultation and joint talks and negotiations, to self-determination. Scope can vary from the operational level (how the job is done), to the tactical level (matters pertaining to work organisation, technology, pay systems etc.) and the strategic level (matters related to company missions and goals, investments and de-vestments etc.). Participation, traditionally, is divided into two main forms; direct and indirect. Direct participation, furthermore, can be divided into three forms; individual, team-based and collective. In the latter form all employees of the unit in question take part in a forum (e.g. staff meetings or ad hoc project groups) that influences management's decisions. Indirect or representative participation, i.e. participation through elected representatives, may also be termed collective, but differs from direct collective participation in the same way as representative democracy differs from direct democracy. Direct participation is at hand when employees are involved in arrangements such as appraisal interviews, quality circles and suggestion schemes or have a say during more informal interactions with management. First and foremost, however, it is evidenced through the degree of job autonomy granted to or achieved by individuals or teams of employees. Job autonomy is positively associated with skill discretion and varies according to traditions within the individual trades and professions and according to the organisation of work implemented by management.

In the Danish industrial relations system there are several channels for representative participation. *Local union representatives* (shop stewards) function in most workplaces covered by a collective agreement (about 80 % of the Danish labour force is covered). Workplaces with more than 35 employees are entitled to and usually have a *works council* (a joint body of management and employee representatives). Furthermore, by law workplaces with 10 employees or more must have an elected employee H&S *representative* and with more than 20 a H&S *committee*. A fourth channel, open to employees at workplaces with over 35 employees in the private sector, is *representation on the company board of directors*.

## Theoretical background

The point of departure for the present research is the surprisingly synchronous growth during the past few decades of two phenomena. One is comprised of modern forms of management focusing on human resources, empowerment and involvement of employees through teamwork, task delegation, etc.; the other is made up of an increase in psychosocial work environment problems as witnessed in surveys of employee contentedness, increasing absenteeism because of stress and increasing numbers of work-related mental disorders among employees that eventually exclude them from the labour market. The tendency to decentralize decision-making in companies' organisation of work in general is referred to as job autonomy or participation of employees in decisions on how their job is done. The question, therefore, arises as to how it can be that increased participation and increased mental strain and overload are concurrent. More specifically, the ruling paradigm for understanding the relationship between job demands and the mental health of employees. based on R. Karasek's and T. Theorell's demand-control model, is questioned. According to this model (Karasek and Theorell, 1990), increased participative decision-making allowing for skill discretion increases the employees' 'job control' which compensates for increased psychological job demands, as evidenced empirically by Karasek and Theorell and many other researchers applying the model.

Employee participation in general is perceived as a beneficial development by all parties in employment relations; good for employees' well-being and motivation and good for productivity. However, at the same time it is a complex phenomenon with different meanings and rationales. Hyman and Mason (1995) identified three fundamental, historically constructed traditions within the theory and practice of participation: *Employee Involvement (EI)* building on a 'unitarist' conception of common interests, *Employee Participation (EP)* building on the conception of a social compromise between two parties with inconsistent interests, and *Industrial Democracy* (ID) building on the conception of workers' right to decide for themselves at the workplace. Whereas the latter model has hardly materialised in social

reality, it is a living tradition both in trade-unionism and academic research reflecting rank and file manifestations and calls for 'democratization' or 'humanization' of working life. H. Ramsay's 'cycles theory' from the 70s, ascribing developments in worker participation principally to the workers' movement (Ramsay 1977), has been critically revised by others, e.g. M. Poole et al, downsizing Ramsay's cycles to 'favourable conjunctures' (2001). Other writers, especially from the Anglo-Saxon world, have stressed the demise of participative structures as neoliberal policies gained momentum in the 80s and 90s (Harley, Hyman and Thompson 2005). In northern Europe, not the least in Scandinavia, however, the *democratic rationale* of employee participation is still vivid (Hvid and Hasle 2003). Both in Sweden and Denmark the trade union federations in the 90s launched programs on 'the development of work' inviting employers to jointly build up participative structures in companies with the aim of increasing productivity as well as enhancing the quality of work life (ibid.).

While the tradition of EP includes a democratic impetus, it is first and foremost expressed through reformist actions by the state to "provide protection for both employees and employers...by ensuring a balance between rights and obligations shared between the parties and enshrined in the law" (Hyman and Mason 1995: 16). The European social democratic parties have been carriers of this tradition building on a 'social-integrationist' rationale (Knudsen 1995). In the Scandinavian countries, participative structures like works councils to ensure an ordered articulation and negotiation of different interests have been instituted by collective agreement. The main form of participation furthered by this tendency has been representative participation.

Whereas the EP tradition and its institutions are still visible and active in Northern European countries and in the 'social dimension' of EU, globalisation and the spread of neoliberal thinking have been supportive of the first tradition. El, to which the EP tendency has given way, according to several writers (Hyman and Mason 1995, Marchington 2005). Basically aiming at increasing employee output, this model takes its point of departure in the belief that optimization of work performance takes more than improving physical conditions or higher wages. The 'Human relations' school of the 60s and 70s successfully influenced employers to establish task discretion and job enrichment. In the 80s, when concerns for quality and reliability of production became more pertinent in international competition and therefore the need that employees internalize company values, 'Human Resource Management' successfully advocated employee commitment, empowerment and involvement as strategic principles for company development. Hence, employee participation, in the general meaning of the term, may follow from the El tradition at work in companies, but now based on a rationale of 'utility' (Knudsen 1995) and determined by management's willingness to grant employees' influence on decisions pertaining to the task, but no further. The typical form of participation in the EI tradition, accordingly, is direct participation by individuals or teams.

Whereas the change from collective, often union-based, forms of participation to individual or group-based direct forms often had a radical character in Anglo-Saxon countries, this was much less the case in Scandinavia. New forms of direct participation, such as team-work and individual appraisal and development schemes, were added on to already existing forms of direct participation, as shown by the EPOC study (EPOC 2005), and the structures for representative participation on the whole remained intact. There has been no marked conflict over the changing forms of participation; rather there has been a changing discourse and a gradual inclusion of new elements in the institutionalised cooperation between unions and employer organisations. As epitomized by the basic 'Cooperation Agreement' between the Danish Employers' Confederation and the Danish Union Confederation there is consensus that both direct and representative forms of participation are desirable, and that both are conducive to higher productivity as well as a better work environment and well-being.

Bearing these developments in the forms and rationales of participation in mind we now turn to the paradoxical simultaneous increase in participative work arrangements and psychosocial problems in the work environment. In general surveys (European Foundation 2006a) it is found that work intensity has increased throughout the EU. It seems reasonable

to conclude that so have psychological job demands. The fact that jobs in the manufacturing sector have given way to jobs in other sectors like service and care only strengthens this observation. At the same time, however, it is evident that job autonomy has also increased, as witnessed by the EPOC study and by the EWC Surveys by the European Foundation (2006a). Statistics as well as research, on the other hand, show that the psychosocial work environment has deteriorated during the same period, both at the EU-level and in Denmark (European Foundation 2006b; Siegrist 2006; Pejtersen and Kristensen 2009). Given these developments it is obvious to conclude that either the context at organisational or societal levels has changed so much since the demand-control model was developed that increased job autonomy no longer compensates for increased psychological demands, or that job autonomy by itself has developed into a strenuous factor.

As others have already pointed out (Wainwright and Calnan, 2002) the demand-control model was developed in a culture of industrial work and framed by a certain normative position of a win-win scenario uniting interests of productivity gains and interests of increased health and well-being. It is possible that this discourse has in fact been undermined by the way in which management philosophies and employers have understood and utilised job autonomy/employee participation in line with the dominant utility rationale in the quest for internal organisational flexibility. Furthermore, developments in economic structures implying new types of work arrangements (contract work, casual work, networking, etc.) and adding structural flexibility to internal flexibility may have changed the scope of employees' decision-making powers. Lastly, changes in societal or cultural factors of identity and consciousness, e.g. the processes of individualisation and self-realisation (Baumann 1998) may have changed fundamentally the mechanisms of the model's workings.

The surrounding societal factors lie beyond the scope of this study, whereas the possibility that job autonomy alone has been decoupled from its propensity to maintain a healthy psychosocial work environment forms the basis of the study's second assumption. It is possible to conceive of the process in which management ideologies and practices have appropriated employees' participation in decisions pertaining to their job as a transformation of the content or character of participation: from a mutual recognition of a social compromise between two parties with different interests to a mutual recognition of company needs to which the individuals must subordinate their own interest. Participation may thus no longer be constructed as a means to promote individual or collective wage earners' interests, but as a necessary contribution to the success of the company and of the individual on the premises of the company. Turning to research focusing on the relationship between participation and the work environment we find some support for this conception of a transformed character of participation, which could explain the shortcomings of the demand-control model in contemporary work organisations.

## Participation and the work environment

Studies into the significance of representative participation to the work environment are quite conclusive when it comes to the physical work environment: there is a clear and positive connection between organised labour, the existence of health and safety committees, etc. and the health and safety standard (Walters and Frick 2000). Results are much more inconclusive when it comes to the psychosocial work environment. Most research points to the incapacity of representative H&S bodies to deal with these matters as, in most cases, they are connected to managerial issues on which H&S bodies have no say (Kristensen & Smith-Hansen 2003). On the other hand, studies of works councils' ability to influence the psychosocial work environment are non-existent or inconclusive.

Results from research into the significance of direct participation to the work environment are ambivalent. North American studies of "high performance" workplaces characterized by 'lean' or 'flexible' production with employee involvement, often through teamwork, find a negative correlation with the physical work environment (Azkenazy, 2001; Foley and Polaney, 2006). In a study based on the European Foundation's 2000 EWC survey Dhondt (2002) found that

job autonomy had not increased sufficiently to compensate for increased job demands. Reviewing international research on teamwork, Jessen and Hvenegaard (2000) found a two-sided effect in the work environment. On one hand, teamwork increases job-satisfaction, but on the other, it increases the psychological demands and often blocks social support at work. Kalleberg et al (2009) in response to the question: "Is participation good or bad for workers?" gave an ambiguous answer based on their research: While participatory elements like job autonomy and consultation are found to reduce stress among Norwegian workers, another element, teamwork, is found to have the opposite effect.

It seems reasonable to maintain that participation in its modern direct forms has lost some of its capacity to provide that type of 'job control' that Karasek and Theorell found effective in offsetting psychological strain. Employee participation, or involvement as it is most often named, may be framed in a way and/or embedded in contexts that only partially or seemingly put employees in control when performing their jobs, although more responsibility and decision-making powers have been delegated to them. The reviewed literature, much more thoroughly presented in Busck et al (2009), gives reason to believe that participation may fail to deliver employee well-being, notably if: 1) work demands are so excessive that even the highest degree of job autonomy does not take away the pressure, 2) participation is individualised to an extent that relations of solidarity are disturbed and collective efforts against over-exploitation abandoned, 3) participation is embedded in productivity-targeted work systems, which pre-empts skill discretion, or 4) participation is socially constructed as a one-sided commitment to company values.

In our study we expected that the work environment effects of employee participation in all its forms would, overall, show a positive relationship, but also that, possibly, specific examples of organisational contexts and modes of participation could be found, in which participation would not contribute positively to the work environment or even may influence it in a negative way. To guide our investigations we formulated two research questions: 1) how is employee participation in its different degrees and forms associated with work environment quality? 2) which mechanisms are active in bringing about a positive or negative effect from participation on work environment quality?

# **Design and methodology**

The study was conducted as a multiple case study of 11 workplaces from six industries: two food manufacturing factories, two hotels, two schools, two hospital wards, two banks and one IT company. From the outset it was the intention to include two relatively similar workplaces regarding size, work processes and products from each of the six industries, but with a clear difference regarding the quality of the work environment (QWE). Ultimately, due to difficulties in getting access to companies and misleading statistics of absenteeism, which we believed would indicate QWE; this ambition was only partly fulfilled. All workplaces met the criteria of having a number of employees that made the existence of works councils plausible.

Studying the significance of participation to the work environment (WE) includes an array of aspects. On one hand, employees may have a say through formal or informal channels on matters obviously pertaining to WE (e.g. those covered by the mandatory workplace assessment form). This clearly applies to the physical WE, but only partly to psychosocial matters as these in the main are regarded as conditioned by the job or to relations between management and employees. On the other hand, the mental health and well-being of employees to a large extent depends on their influence over and integrity in dealing with exactly these matters. Furthermore, it depends on social relations with managers and colleagues. To get the full picture the study's ambition was to uncover not only the forms, channels and processes of participation, but also the level of influence (the intensity of participation) resulting from participative processes as well as its scope, i.e. the extension of influence to operational, tactical or strategic issues. We perceive influence as the possible outcome of participation: participation implies influence to the extent that decisions reflect the

opinions, ideas, and proposals of employees or their representatives, as opposed to purely management views.

Analytically employee participation and its resulting influence were defined as independent variables, while QWE was defined as the dependant variable. The study comprised both qualitative and quantitative methods. At all workplaces semi-structured interviews were conducted separately with the top manager, middle managers, shop stewards and H&S-representatives to obtain knowledge about the participative regime at the workplace. At the same time, information was collected on how participation was embedded in wider organisational structures and embraced by policies and values. Furthermore, information about the WE situation, existing problems and policies was gathered.

A questionnaire was used to get responses from lay employees asking them to assess different aspects of QWE and well-being (dependent variables) and their influence on different aspects of job performance and demands (independent variables). In addition, they were asked to assess other factors (independent variables) that are known to be of significance to WE, such as support from colleagues and recognition from management. Response rates varied from 51 to 79 percent, with the exception of one case at 33 percent. A third data source comprised of documents from each workplace, relating personnel and work environment policies, absenteeism statistics, minutes from works council and H&S committee meetings and H&S workplace assessments.

The analysis followed consecutive steps. 1) each workplace was analysed, 2) the two workplaces in the same industry were compared, 3) comparative analysis across the whole sample of 11 workplaces based on the questionnaire responses was conducted supplemented with statistical correlation analysis. To assist in the interpretation of differences and patterns in this comparison a model or typology of 'participation profiles' was used that reflected the way participation was embedded in specific organisational structures and values at the different workplaces. While in this article we must abstain from presenting detailed results from the two first analyses we will, in the following, present our main findings as to how the quality of the work environment is associated with 1) the strength of participation, and 2) different modes and organisational contexts of participation.

## Findings: the interplay between participation and QWE:

By transforming the employees' qualitative assessment of their work environment (WE) on a scale from 'very bad' (1) to 'very good' (5) into a numerical scale from 0-40, the questionnaire responses were quantified. Likewise, the employees' experience of stress, fatigue and problems in work-life balance were quantified (and added together). In the table below, the aggregated levels at the 11 workplaces are displayed. For well-being the order is reversed so that a high level indicates the relative absence of mental problems.

Table 1: **QWE-scores**. The scores on different aspects of work environment and well-being for the 11 workplaces (the two highest scores on each dimension are shown in bold). The order of workplaces reflects their score on the first variable, the total work environment.

Workplace	Total work environment	Psychosocial work environment	Physical work environment	Well-being
Hospital Y	33,0	33,0	35,1	30,0
School X	29,0	28,0	28,0	27,7
IT X	28,8	27,6	30,5	26,7
Hotel X	28,3	29,6	25,2	26,8
Hotel Y	28,3	27,8	26,5	25,5
Bank X	27,9	27,3	29,4	24,8
Bank Y	27,6	27,1	27,6	26,2
Factory X	26,2	25,8	24,5	28,8

Hospital X	25,8	29,4	18,9	27,3
School Y	24,4	23,4	22,0	24,4
Factory Y	22,3	22,3	23,0	20,5

If we add the scores on all four dimensions for every workplace in the table, we get almost the same rank order as results from the dimension 'Total work environment'. For this reason the score in the first column analytically was defined as QWE and carried on to the continued analysis. The scores correspond well to our findings in the qualitative study – with one exception, hospital X. On both psychosocial WE and well-being hospital X scores among the highest ranking, but falls down on total WE due to a very low score on physical WE. This was reasoned by a widespread dissatisfaction with the ward's old and run-down premises, resulting in a somewhat biased total score.

The strength of direct participation was measured by questions regarding influence on core issues pertaining to the job and workplace. Learning possibilities in the job and the existence of collective efforts to influence work demands were included as well as a question about the desire for more influence, interpreted as an indicator of a 'participation deficit'. The results in quantified form are displayed in table 2, below, where the workplaces are ordered after their score on QWE.

Table 2: Workplace scores on **direct participation** variables (two highest scores in each column in bold). (\*values in this column are reversed so that a high score means low desire for more influence)

Work	Influence	Influence	Influence	Inform	Learning	Collec-	Desire	SUM:
place	on work	on work	on work	ation	possibiliti	tive	for more	Rank
	load	speed	arrangem		es	efforts	influence*	order
Hosp. Y	21.9	23.8	29.5	27.6	34.9	27.6	26.2	1
School X	24.0	27.0	31.0	30.0	29.0	19.0	29.0	2
IT X	23.8	26.1	27.2	18.4	27.0	20.0	18.1	7
Hotel X	26.5	29.6	27.8	23.5	28.3	19.5	20.9	4
Hotel Y	17.4	18.7	23.5	24.3	25.2	22.9	23.5	9
Bank X	20.3	22.1	25.8	21.2	29.4	19.7	20.6	8
Bank Y	21.0	23.8	25.2	19.5	28.6	22.4	20.5	5
Factory X	15.2	25.0	20.2	20.3	17.7	21.1	19.2	10
Hosp. X	21.8	24.0	27.7	27.7	33.1	26.9	23.2	3
School Y	24.1	26.1	29.3	19.8	29.0	18.1	18.3	6
Factory Y	17.2	20.4	23.0	16.4	24.2	21.3	14.2	11

Table 2 demonstrates a pretty good match between level of QWE and direct participation. The strength of representative participation was also measured and presented the same match, although a little less visible. The match becomes almost perfect if we compare the scores on psychosocial WE from table 1 (with hospital X ranking 4<sup>th</sup>) with the scores in table 2. There is also a fine match between high levels of participation and low desires for more influence, cf. the second to last column in table 2. Correlation analyses confirmed a strong and statistically significant correspondence between participation/influence and QWE. Analysis of the interplay between QWE and other variables influential in forming the WE showed that some of these variables could mitigate, at least partly, the negative effects of low levels of participation, but in most cases there was a correspondence between high levels of participation and high levels on these other variables.

## The negative side of participation

The fact that the studied workplaces agreed to let us in meant that they not only recognised the value of participation but also, by all probability, had an acceptable WE standard. Accordingly, we did not find any violations of good H&S practices. Nevertheless, the employees' responses regarding psychosocial WE showed distinct differences among the workplaces and, when compared with the national aggregated data on 'job satisfaction', placed five of the workplaces below the national average. Furthermore, in most of these cases a deficit in participation could not explain the poor result. Focusing on contextual factors and the possible outcome of a transformed mode of participation we applied 'participation profiles' as an analytical model. Based on our insight into the configuration of management-employee relations and organisational structures and values at all studied workplaces, we identified four profiles linked to one or the other of two regulatory models (IR and HRM): the IR- or partnership-model, the HRM-model, the combined IR/HRM model and the democratic model, linked to both IR and HRM. Notably, all workplaces had signed collective agreements and employed (mostly) organised labour.

Table 3: Workplaces grouped according to participation profile

Democratic model	Partnership model	HRM model	HRM/partnership model
School X Hospital Y Hospital X	Factory X Factory Y School Y	IT X Hotel X Hotel Y	Bank X Bank Y

All findings showed that participation was relatively well developed at all workplaces, but the way in which it was embedded in the organisational context differed along a number of parameters: the extent to which management as well as work organisation at the studied workplace was more or less controlled by a concern management, the way in which representative channels were developed, the way in which participation was part of an all-inclusive attempt to secure employees' voice and interests, and the way in which it was accompanied by systems of performance measurement and pecuniary rewards.

At School X and the two hospital wards, participation was embedded in a spirit and structure of genuinely democratic governance. All forms of participation were in play, but most strikingly, direct collective forms were pursued. Participation, furthermore, extended to more tactical issues than in any of the other workplaces. At the two factories and school Y participation primarily functioned as a union-management partnership and was practised very much in accordance with the formal regulatory framework. Employee representatives played important roles, but lay employees were only marginally invited to take part in decisions, except for those pertaining to their job performance. At the IT-company and the two hotels, participation was primarily a matter between the single or team of employees and their manager. Representative participation was weak, in the main limited to the mandatory H&Sstructure, and the scope of participation was determined by management considerations as to what was beneficial to productivity, employee well-being being one element. Finally, in the two banks we found a combination of features from the HRM and the partnership models. The union representatives were consulted, but only on a narrow range of issues. The shaping of direct participation, for instance a recent change to team-work, was unambiguously in the hands of management and connected to productivity considerations; as one manager put it, "As long as you are a success you decide for yourself".

We found three of the five workplaces with the lowest QWEs in the partnership model. Factory X, with machine-bound work and a physically strenuous WE (but a strikingly high score on well-being) was also low on participation; hence a paradox did not exist. Factory Y, ranking lowest of all on QWE, also had a relatively low score on participation in the

responses from employees. However, management had invested quite many resources in the introduction of a 'lean' system of work organisation, at least in theory providing decisionmaking powers as well as responsibility to employees. Our material suggested a spilt in the group of employees among those seeing an advantage in the new system and those seeing a disadvantage. We saw an example of a transformed mode of participation, where the interests of employees were overruled to the benefit of productivity targets with a negative effect on the psychosocial WE. School Y, also very low on QWE and with records of teachers that had succumbed to stress, scored quite high on participation, which our qualitative material sustained. We saw it as partly a result of a transformed participation as job control had been increasingly transferred from the single employee or his workplace to central administrative bodies and partly as a result of weak use of existing options for participative decision-making (which obviously is possible as school X showed). The two banks in the combined model were both relatively low on QWE, but held middle-positions on participation. The mode of participation, however, was clearly linked to productivity targets. It might appeal to personal desires of self-realisation but was obviously ineffective when it came to influencing strenuous work demands. Participation was shaped on the conditions of (top) management and the IR structures seemed rudimentary.

## **Conclusions**

Our findings lend support to our main hypothesis that participation effects QWE positively. Direct as well as representative participation correlates positively with QWE. Although theoretically we cannot say anything about cause and effect in such correlations, logically it is more likely that participation causes QWE than vice versa. Other factors are also positively correlated with QWE, and, although workplace participation may be a necessary condition for high QWE, our data also demonstrate that it may not be a sufficient condition. However, the way participation is framed by management policies and embedded in the organisational context conditions the effects of participation on QWE. The stronger participation is with respect to intensity and scope and the more diverse with respect to forms, the better is QWE. In particular, it seems that direct collective participation, found at the workplaces with a democratic governance system of management-employee relations, is very helpful in resisting or compensating for strenuous psychological demands. On the contrary, the positive effect of participation may be hampered and even made to have a negative effect on the psychosocial WE and well-being, if participation is limited to operational issues pertaining to job performance, framed by a top-down involvement scheme and/or linked to productivity targets and performance control of employees.

Although our sample was small, we did find some support for our second hypotheses about the transformed character of participation, which may explain why the demand-control model no longer has general validity. Job autonomy may have increased during the past few decades, but job control, implying influence not only **in** the job, but also **over** the job, i.e. the working conditions including psychological demands, may actually have decreased as work systems and procedures have been stream-lined, standardized and computerized to serve productivity targets in increasingly larger and centrally planned organisations. Participation without access to influence in such matters is no longer capable of maintaining the necessary balance between the interests of the organisation and the interests and resources of its employees.

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