# EMPLOYEE PARTICIPATION AND WELL-BEING: DENMARK AND NEW ZEALAND

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#### Introduction

We evaluate the impact of employee participation on the quality of the work environment (QWE) in Denmark and New Zealand (NZ). Some critical contributors to the work environment, notably work/life balance and occupational health and safety (OHS), have been major recent policy concerns in both countries, often linked with productivity. Since the 1970s QWE has been the central concept used in Scandinavia to describe what was earlier termed OHS. The shift in language represents a broadening of focus from health and safety hazards to include the psycho-social work environment, a term denoting how job demands and organisational structures influence the psychological well-being of employees.

Substantial long-term evidence suggests that employee participation and influence in workplace decision-making impacts positively on the work environment (Arthur 1994; Delaney & Huselid 1996; Doucouliagos 1995; Meyer & Topolnytsky 2000). British and Australian studies (Walters 2004; Walters *et al.* 2005) have found that worker representation and consultation produced better outcomes in OHS than management acting alone. Similar studies have also suggested that trade union presence positively impacts on OHS (Fairbrother 1996; Saksvik & Quinlan 2003). Additionally, the existence of a broad framework of participative practice through unions, and works councils as exist in European countries, is likely to impact on the effectiveness of specialised OHS committees (Harris 2004; Knudsen 2005).

We examine both direct and representative participation. Direct participation through various mechanisms, such as semi autonomous teams, empowers employees to exert job autonomy or influence over their immediate work environment, including the hours they work. Representative employee participation (REP) may occur through trade unions and workplace committees of various kinds. Danish union membership density is high, at about 70% if we exclude retired members, although this has declined from almost 80% in 1998 (Visser 2009). Union membership density in NZ declined more significantly from the 1980s, but has stabilised at over 21% since 1999 (Feinburg-Danielli & Lafferty 2007). Legislation in most European countries supports works councils. However, in both Denmark and NZ the only form of legislatively mandated non-union workplace employee representation occurs through OHS committees. Nevertheless, other forms of non-union REP are well established in both countries.

Danish OHS representation was instigated by the *Work Environment Act 1975*, and in NZ by the *Health and Safety in Employment Amendment Act 2002* (Knudsen 1995: 91-2; Harris 2004). The threshold for establishment of Danish OHS committees is 20 employees, and 30 for committees or representatives in NZ, although Danish enterprises with 10 or more employees must have employee safety representatives and smaller NZ enterprises may have representatives if requested by employees or unions. The Danish committees' jurisdiction includes the planning of changes in production where this impacts on the work environment. The jurisdiction of NZ committees is more specifically limited to OHS and hazard prevention, although it is not known how widespread these committees are.

Danish cooperation committees exist in most enterprises of 35 or more employees by agreement between the employer federation and the main union federation (LO) since 1947. Composed of equal numbers of employer and employee representatives, cooperation

committees are forums for consultation over working conditions, training, work organisation and especially technological and organisational change (Knudsen 1995: 82-90). In a recent NZ survey 40% of employees reported coverage by similarly composed joint consultative committees (JCCs), although these are not subject to a general agreement, and vary greatly in role and effectiveness, with employee representatives chosen by employers in over a quarter of instances (Boxall *et al.* 2007: 160-1).

Our hypothesis is that effectiveness of employee participation correlates positively with QWE. We also expect the correlation between these two variables to be stronger where the depth or range of employee participation is greater. The comparison between Denmark and NZ might be instructive in this regard, since the embeddedness of representative participative practices is greater and longer established in the former. The remainder of the paper introduces the research design and methodology, reports the results of the research and draws appropriate conclusions.

### **Research Design and Methodology**

We adopted a multi-method case study approach targeting 2 case organisations in each country in each of 3 industries: education, health, and food manufacturing. Food processing is the largest manufacturing sector in both Denmark and NZ. Education and health are large service industries, commonly overlooked in studies of this kind. In the case of health the Danish workplaces were located in a hospital, whereas the NZ ones were separate aged care facilities. Despite these differences, however, nurses are the dominant occupational group in all cases and the operational environments share many similarities.

Data was collected from three organisational sources:

- 1. documents:
- 2. semi-structured interviews with chief executive or HR manager, senior employee representative and one other employee representative on OHS committee (including a union delegate where appropriate); and
- 3. questionnaire survey of sample of employees.

The Danish data was collected from April to November 2008 and the results published in Knudsen, Busck & Lind (2009). The NZ study replicated the Danish one, with data collected from November 2008 to November 2009.

# Quality of work environment

QWE was measured in the survey from seven questions indicating total work environment and psycho-social work environment, or workload and stress. A score out of 40 was measured for each workplace in each dimension, calculated by allocating points for each response multiplied by frequency and divided by total respondents. Questions with a five-point response scale scored 40, 30, 20, 10, and 0 from the most to least positive response, following the practice of the Danish National Research Institute for the Work Environment (Knudsen, Busck & Lind 2009). Higher scores indicated a more positive work environment. Scoring for workload and stress questions was reversed because the most positive response was negative ('never/almost never').

Total work environment was measured from the following question in Denmark: 'how would you characterise your physical work environment?', with responses over a 5-point scale. NZ total work environment was measured from the following question: 'are you satisfied with the safety and comfort of your working conditions? (yes/no). Scores were calculated on the basis of frequency of 'yes' multiplied by 35, and 'no' multiplied by 5 and divided by total number of respondents to gain a score out of 40 equivalent to the Danish ones.

Workload and stress were measured on the basis of six identical Danish/NZ questions with a 5-point scale and integrated into an index:

1. do you have more work than you can accomplish?

- 2. are you required to work overtime?
- 3. how often have you felt worn out from work?
- 4. does your work put you in emotionally distressing situations?
- 5. how often have you felt stressed?
- 6. do you think your work takes so much of your energy that it effects your private life?

An overall QWE index score was constructed for all dimensions.

## **Direct Participation**

The degree to which employees felt empowered by direct participation was measured by the following four standard questions:

- 1. Do you have significant influence on how much work you do?
- 2. I get information on important decisions in due time
- 3. I have significant influence on how my work is done
- 4. Do you have possibilities to learn new things in your job?

A score was measured for each workplace for each dimension, on the same basis as for QWE, and a composite index for all direct participation was constructed.

## Representative participation (REP)

Different environments for REP in Denmark and NZ required different survey questions. The separate results were interwoven with qualitative data to develop a characterisation of each workplace within a schema of ideal types of representative employee participation (REP), shown in Table 1. These ideal types were developed from the data, and are relative to each other rather than absolute characterisations.

Table 1. Ideal types of representative employee participation

Workplace type	Description
Formal regulatory	REP is minimum required by regulatory framework.  Management/employee representative interaction is not inclusive of lay employees.
Two sub-types:	
a) Dk – formal regulatory     environment includes legislation     & central agreement between     management & unions.	Management/union partnership but not involving lay employees, & REP is minimum required by central agreement & legislation.
b) NZ - regulatory framework	May vary from highly unionised to non union.
confined to legislation & collective (usually enterprise) agreement where it exists.	REP is minimum required by legislation & where relevant, agreement with union. REP practices not involving lay employees.
HRM	Representative employee participation embedded in a humanistic HRM approach.
	Based on management initiative, relatively weak, & mainly confined to mandatory OHS structures.
	Management mainly interested in practices benefiting performance.
Hybrid formal regulatory/HRM	Characterised by mixture of practices in both previous types.
Democratic	Representative practices are extensive & exceed requirements of legislation & in Dk of formal central collective agreements. Employees have wide influence on planning, organisation & development of work through regular meetings & ad hoc committees where issues are discussed before final decisions. Strong cooperation & trust between management & employee representatives.

### **Organisational Analysis**

# Hospitals - Denmark

We studied two wards within the same public regional hospital, DkA employing 150 non-managerial employees, and DkB 73. The employer is one of five regional bodies in the public health system. Nurses constitute the largest occupational group, and are 97% women. Other employees included in the study were social and health assistants. Both groups are almost 100% unionised in separate unions, covered by two collective agreements. Recently, both the nurses and social and health assistants displayed strong solidarity in a national strike over wages.

Danish hospitals represent well-organised industrial relations systems with active networks of employee representatives and cooperation between the parties on education, OHS and other issues. Employees elect union delegates according to collective agreements, and are covered by the public sector cooperation agreement, providing for cooperation committees with sub-units in every hospital department or ward. Hospitals are covered by the legislation requiring OHS committees, but may decide to combine these with the cooperation committees.

Hospital employees experience a physically and emotionally demanding work environment. Stress and burnout occur more frequently amongst hospital employees than the national average according to surveys of the National Research Centre for Work Environment. These surveys show that hospital employees enjoy comparatively low influence in the job, but high levels of job variation, possibilities for personal development and meaningful work. Part-time work is widespread amongst nurses, but surveys show that because of extra and temporary work, their average weekly hours equal the national workforce average.

Both cases are organised on the basis of three shifts. Work is organised in teams, either small teams relating to a group of patients, or larger teams consisting of the whole shift group. Teams have coordinators without managerial responsibilities.

Management is generally responsive to employee needs, partly to maintain staff in a national context of a shortage of nurses. Both managers, with nursing backgrounds themselves, perceive their roles as mediators between demands for cost effectiveness from senior management and employee needs to perform professionally and satisfy individual needs. For example, the number of part-time employees is minimised, but at DkA 20% of employees are temporary due to nurses' own requirements for reduced hours. DkB has fewer temporaries but staff commonly work overtime for higher pay, and hours are managed very flexibly to employees' benefit. The case studies are regarded as relatively attractive workplaces for employees within the hospitals. This was confirmed by the positive assessments of the working environment in surveys of employees, particularly in DkB. Employee assessments of the physical work environment at DkA were significantly less positive, probably because of dissatisfaction with old facilities, whereas DkB employees worked in new facilities where they had contributed to the design. DkB is also a highly specialised unit.

OHS responsibilities are well organised within each hospital as a whole, where considerable expertise can be drawn upon. In DkA the OHS and cooperation committees function separately, but the latter deals with psycho-social issues. In DkB a joint committee is used. These committees are active and effective, with employee representatives also sitting on higher level organisational committees. In addition, middle managers regularly engage with individual employees, and each ward has meetings at least weekly for all employees present on the shift, with work issues discussed with middle management, and where necessary, followed up by the cooperation committees.

# Aged Care Facilities - NZ

One facility was in a small city or town, and the other in a small rural town. Both organisations are run by charitable trusts and overseen by a board of trustees, with a general manager in charge of the facility. The general managers in each organisation are women who are registered nurses with 20-30 years' nursing experience. The organisations are a similar in size employing 75-80 employees, with employees predominantly female and employed as caregivers. NZA employs a greater percentage of registered and enrolled nurses than NZB, which has a greater percentage of managerial roles. The managers themselves differ in that at NZA she had recently completed her first year at the organisation, and was in her first general manager position. She had also been a union delegate previously and clearly supported unions, which enjoy coverage of about 70% at this workplace. The NZB manager had been the general manager of the organisation for 11 years, and made no mention of union affiliation. The level of unionisation here is less than 50%.

Both organisations' OHS committees predate legislation requirements in NZ. They are subject to external accreditation for funding from the public health system. Furthermore, both organisations are involved in an external audit by the Accident Compensation Corporation and for this receive a discount on their employer levies. These external factors seem to play more importance in the formation of the OHS committees than legislation. They also reinforce a focus on accident reporting and hazard notification.

In NZA the OHS committee comprises staff representatives from each department, the general manager, a maintenance worker (who also had OHS tasks in his position description), and two employees on the committee as part of their jobs. Most staff committee members have been long term, and newer staff members may not be aware that representatives are required to be elected by staff. A standard agenda is used for monthly meetings. Representatives report on incidents that occur in their departments, and other issues that arise. Each representative is readily identified by a green name badge, and names and photos of OHS representatives are displayed on a staff noticeboard. The manager chairs the meetings, but is not heavily involved as she is occupied with establishing herself in her role of general manager. This enables the committee to be reasonably autonomous. Committee members receive regular training with an external provider. The main forms of communication between the committee and other staff are via staffroom noticeboards, where minutes are posted, some reporting back to departmental meetings, and a biennial health and safety week with activities designed to raise awareness of OHS. Employees generally are proactive in reporting incidents and potential hazards, and also in following the reports up if action is not taken in a timely manner. Survey respondents indicated a high degree of satisfaction with how the OHS committee dealt with issues, and its timeliness in resolving them.

The general manager operates an 'open door' policy and staff frequently come in and out of her office with questions and comments about operations. The main forms of communication from management are full staff and departmental meetings, memos, departmental communications books, noticeboards, and the general manager sees the union as one form of communicating with employees. The general manager assesses employee decision-making as problematic, but only because the employees lack the confidence to make decisions on their own. The manager indicated that she does not see herself as the sole organisational decision-maker, and this inclusiveness in decision-making was confirmed by a OHS representative who was also a union delegate. Employees surveyed responded positively regarding influence on work and information from management, as well as the effectiveness of representative structures.

NZB's OHS committee also comprises representatives from each department, including one night shift representative. Members are generally nominated and then elected by staff at an

all staff meeting. There is an element of shoulder tapping, generally when no-one has come forward to be a representative, but survey respondents indicated that this occurred often. The committee is chaired by the facilities manager who sets the agenda and provides overall direction for the committee. The key direction of the committee is really set by the management team comprising the general, HR and facilities managers. Employees enjoy being OHS representatives because of the opportunity to learn new things. They are provided with training by an external organisation, although this does not always occur on an annual basis. However, representatives are accountable to the management team, and policy changes that are implemented on the committee's recommendation must be reported on and reviewed in order for them to become permanent. The facilities manager also mentioned employees' complaints about lack of follow-up on items they had raised. Communication with employees is via minutes available in the staffroom and reporting back to departmental or team meetings. Employees surveyed indicated a high degree of satisfaction with the resolution of issues brought before the committee, and its timeliness in doing so, but some were not certain that an OHS committee even existed.

Employees may take several channels if they wish to change their working conditions, including a JCC. One direct means is via a form, which may be anonymous, identifying the issue, how it can be resolved and who will benefit from the changes. Quality circles have also been formed to resolve issues that arise with work processes and environment, and these have been initiated by employees. Nevertheless, interviewees' comments suggest that the emphasis of employee participation is on communication rather than joint decision-making, and with the intention of enhancing the efficiency of work processes. While employees can initiate quality circles, or suggest changes to the work environment, and these are often implemented, there is a sense of all decision-making being deferred to the management team, and employee participation is more about consultation and feedback. Survey respondents indicated a high degree of consultation over change, learning possibilities and information from management. However, most survey respondents thought that JCC representatives were chosen by management, and although they expressed a high rate of satisfaction with how issues were dealt with by the JCC, they frequently did not think this occurred in a timely manner.

#### Food manufacturing - Denmark

The Danish companies are relatively independent units of larger corporations, one manufacturing bread and the other confectionary. Both factories have highly automated production lines where work consists of supervising, maintaining, and feeding the lines, and packaging product. Around half the workforce are skilled trade workers although their wages are not significantly higher than unskilled employees.

In the first (bread) case, DkC, almost all employees are men, partly due to the physically demanding character of the work. Production occurs for 24 hours, seven days a week, based on shifts. DkD is situated closer to a larger city with low unemployment and half the workforce is women. Here the work is based on three shifts during five days, while only a little production is carried out during the weekend.

Work in both cases is organised in teams. DkC teams are based on shift and production line, whereas in DkD they are based on a newly implemented structure allocating new functions. DkD has also implemented lean production concepts.

Almost all employees are unionised and covered by collective agreements providing for elected shop stewards. They are also covered by the general private sector cooperation agreement, which provides for workplace cooperation committees. Both companies operate well-organised OHS committees with elected employee and management representatives, quarterly meetings and updated workplace assessment reports as required by legislation. DkC's participation policy is within the bounds of the formal regulatory requirements of

legislation and the collective agreement. However, DkD has attempted to a greater extent to utilise participation practices to motivate employees for increased productivity.

Management is concerned with employee well-being in both cases, especially because low unemployment at the time that fieldwork was undertaken made it important to maintain attractive workplaces. However, the experience of the work environment is markedly different in each company. Despite physically more demanding work, a higher accident rate and more shift work, DkC employees assess their physical and psycho-social work environments consistently more positively than DkD employees. Less than 15% of employees in either workplace assess their work environment as 'bad' or 'very bad', but DkD employees indicate high workload issues to a significant degree.

Neither group of employees assess their influence on the work environment highly, directly on the job or through representatives in union, cooperation or OHS committees. Lack of influence is notable for workload, although DkC employees experience more influence over work speed.

## Food manufacturing - NZ

Volume constraints and a tight labour market create pressures for food and beverage production growth in NZ. These pressures create a requirement for constant improvements to production efficiency each year; and more effective skills and labour systems that deliver higher productivity and better pay and conditions of employment (Food and Beverage Taskforce, 2006). The food manufacturing companies studied exhibited significant differences. NZC is a New Zealand owned bread manufacturer. The workforce of 65 is of diverse ethnic origin, including Asian, Maori and New Zealand European and Pasifika staff. NZD is a foreign owned subsidiary, which manufactures a range of quality food products. Around 1,900 people of various ethnicities are employed, of which 350 are casual.

In both food manufacturing workplaces the surveys showed that employees are commonly asked to work overtime and feel worn out from work. However, NZC employees report these trends more frequently, as well as exhibit greater frequency of stress, being in emotionally distressing situations and high workloads, than respondents from NZD. Job satisfaction levels are not surprisingly lower at NZC.

Surveys indicated a significant, but mixed, degree of direct participation at both food manufacturing workplaces, but representative employee participation varies more. At NZC there are no union members, and staff mainly work individually or in pairs rather than in larger teams. At NZD approximately 70% of staff are union members, and a strong team structure operates in each department with compulsory team briefings for all staff. Apart from unions, employee representation at both food manufacturing organisations occurred through OHS committees as well as social committees, cross-departmental exchange committees and customer oriented quality committees. OHS committees included management and employee representatives, the latter from different departments as a means of improving cross-plant communication, although at NZC the committee was numerically dominated by management. Employee representatives were chosen primarily on the basis of job position rather than through election by employees. This tends to limit representativeness and accountability.

Due to its larger size, NZD has departmental committees as well as a site committee, which meet monthly. All OHS monthly results are fed back through team briefings as well as the noticeboards. Communication between NZC OHS committee and staff is more top down, principally through newsletters. The primary focus of both committees was hazard monitoring and OHS incidents, but they also confirmed management expectations in engaging strategically. Responsiveness and engagement of the OHS committees can in part be measured by the frequency of issues being taken to them and the length of time taken to resolve them. Only 31% (n4) of NZC survey respondents had raised an issue for the committee in the past, with half of these considering they had been dealt with satisfactorily

and with an immediate resolution. At NZD 53% of survey respondents had raised an issue for the committee in the past, with 67% gaining resolution within a month.

As with the OHS committees, there is evidence that NZD participative practices were more structured and effective through JCCs. NZD has multiple JCCs at departmental level. Only half of NZC respondents recognised the existence of a JCC, and only half of those who had taken an issue to the JCC at NZC considered it had been dealt with satisfactorily, compared with 80% at NZD. In both cases quality committees were more temporary because they were concerned with specific production issues.

#### Schools - Denmark

The two schools are located in villages on the periphery of a large municipality. DkE is a small school covering the first six classes (equivalent of primary in NZ), with only 15 teachers. DkF is larger, covering all public school classes (up to 10<sup>th</sup> year, equivalent to NZ primary plus junior high school) and employing almost 60 teachers.

Danish public schools are administered by the Ministry of Education, but managed by municipalities and school principals. Working conditions and pay are determined by national collective agreement, supplemented by local agreements on extra payments and allocation of working time. The vast majority of teachers are unionised. Teachers are covered by the public sector cooperation agreement, providing for union delegates and cooperation committees, and by legislation requiring OHS representatives. Cooperation and OHS committees operate at school and municipality levels.

Principals are legally required to manage in cooperation with employees through representative forms of participation. This underwrites negotiation rights over working time issues for union representatives, and the cooperation committee is entitled to 'receive information and discuss all issues of significance to working conditions and employment relations', and to 'codetermination in defining principles for the organisation of work and personnel relations' (KL & KTO 2008). Without agreement, however, management decides.

Traditionally teachers enjoyed a high degree of direct participation and influence in decisions relating to their work. However, work demands have increased as job autonomy and social status have declined since the 1990s, and principals and school boards (with teacher and parent representation) have taken more powers of regulation. Performance measures for schools and teachers, individual pupil education plans, and national standards have been introduced. Teachers experience comparatively high levels of workload, stress, exposure to physical violence or threats of violence, and a lack of possibility for professional development (Christiansen 2007).

At DkE the principal and union representative expressed satisfaction with the school's functioning and employee well-being, although they were aware of rising demands on schools and teachers. Survey responses were consistently positive regarding work environment, which seems above average for teachers. At DkF the principal and employee representatives also referred to increasing demands. In 2007 the school experienced staff and budget reductions. Only 41-46% of teachers surveyed rated their physical or psychological work environment positively, although 56% did so for total work environment. About a third experienced high workloads and stress. These trends are confirmed by the Workplace Assessment.

DkE's principal and union representative are committed to democratic governance where all important work issues are discussed and resolved consensually. The principal believes that this strengthens teachers' engagement and higher quality decision-making, and the union representative claims that teachers 'want to take part in decisions'. Class-teams of two teach most disciplines required for classes, and partly subsume individual autonomy. After allocation of tasks the teams are completely autonomous regarding methods and content. Individually teachers may influence their work situation through annual appraisal and

development meetings with the principal, where requests for further training or teaching materials have a high chance of being met. Collective direct participation is institutionalised in weekly meetings of staff and various committees where the budget, the school quality report, purchase and implementation of new technology, the school's Workplace Assessment, and individual cases regarding pupils and parents are discussed. The high level of direct participation is confirmed in the survey responses.

Representative participation at DkE is also highly developed. The cooperation and OHS committees mainly formalise decisions of the weekly staff meetings, and the union delegate is also the OHS representative. Both principal and union representative share a view that the school's participative practices have a positive impact on the work environment, with teachers exposed to fewer risks from increased demands.

At DkF the principal and union representative value employee participation, but younger teachers expect management to take decisions outside their immediate work area. There is an awareness of reduced job autonomy. However, individuals and teams enjoy considerable autonomy in deciding how teaching is done. Similar opportunities also exist in annual appraisal and development meetings as in DkE. Survey responses regarding direct participation were largely positive, although less so over influence on workload. In addition, although similar opportunities for collective direct participation exist as in DkE, staff plenary meetings are less frequent, and competence has shifted over time from these meetings to the principal and three department heads.

Representative participation is well structured at DkF. The union representative is vice chair of the cooperation committee that meets every second month, and a member of a subcommittee dealing with working conditions and budget, and meeting weekly. The OHS committee normally meets 4-5 times annually, and monitors the Workplace Assessment. In 2007 it met more frequently because of many reported psycho-social problems and developed an action plan to combat stress.

The principal and employee representatives at DkF are committed to employee participation and believe that it is a positive factor for the work environment. However, this has not prevented notable psycho-social problems. Comparison of survey responses between the two schools also indicates that DkE teachers experience more influence on how they do their work, are better informed and experience more influence through channels of representative participation than DkF teachers.

#### Schools - NZ

Both cases are co-educational state secondary schools. NZE is in an Auckland suburb with over 1000 students and 60 teachers. NZF is located in a small town near Auckland, with 650 students. Both schools are highly unionised.

General employment conditions are nationally determined in schools, and have been subject to similar demands recently as those in Denmark. However, different work environments operated in the two case studies. NZE survey respondents were far more likely than those from NZF to assess the safety and comfort of their working conditions positively. NZF survey respondents were more likely than those from NZE to experience high workload, feel tired or experience emotionally distressing situations. These different QWE outcomes were associated with different management styles.

Each school has a number of joint management-employee forums, including staff and department meetings, although the range was greater at NZE, where management is committed to participative decision-making and staff had designed policy relating to timetabling and class size. NZE and NZF teachers are represented on the Board of Trustees. NZF is more management led, with the most important forum being the management team, and other meetings were management-initiated and consultative, rather than decision-making forums. NZF survey respondents were less likely to feel they had

influence on their work environment than their counterparts at NZE, where respondents indicated a high degree of engagement and satisfaction with the JCCs, although there was a strong belief that employee representatives were chosen by management or volunteered, rather than being elected by employees. NZF employees responded much more negatively across these dimensions.

NZE experienced significant employee dissatisfaction with management five years ago. The issues were resolved eventually through a hazard notice being lodged under the HSE Act, and this may have produced a bias towards the OHS committee as a means for dispute resolution. The OHS committee at NZE was seen by the principal as an employee body, and he was unaware how representatives were chosen. The committee's agenda is set by employees and it is chaired by the union branch chairperson. He considered that the committee was more influential as an employee group than the union in that school, and that employees take matters to it before the union. Union training for employee representatives had been accessed, and email assisted communication. Most survey respondents, however, considered that employee representatives volunteered, which is in breach of the HSE Act.

No-one at NZF had a clear idea of the role of its OHS committee, and it was not a functioning part of the school's participative processes. The principal spoke of it as an ongoing committee, but one member stated that it had not met for years, and a third of survey respondents indicated that the OHS committee did not communicate with staff. The chair is a member of the management team and a unionist, who considered that OHS issues were dealt with satisfactorily in the school but not by the committee. Members of the committee were unaware that they could access training, and a quarter of survey respondents were unaware of school OHS policy. NZE survey respondents indicated a high degree of awareness of, and engagement and satisfaction with their OHS committee, whereas NZF employees responded very negatively to these issues.

### **Quality of Work Environment**

Table 2 provides summary survey results for each workplace for QWE. The two highest scores in each dimension are highlighted. DkB, one of the Danish hospital wards, has the best work environment according to employees, and NZB, one of the NZ aged care facilities, ranks second. However, all four health sector workplaces score highly, with NZ workplaces ranking higher for total work environment, and Danish workplaces ranking most positively for workload and stress. One NZ school (NZF) ranks lowest for QWE, because of a very low score for workload and stress, where the other NZ school also ranks lowly. These trends indicate industry-wide factors. Internationally, teachers report very high levels of stress and low job satisfaction in surveys (Markey et al. 2001: 137-38), and it was also evident in the qualitative evidence for one Danish school. High QWE scores may also be associated with the general attention to health issues in the health sector. Within two industries there are also clear workplace trends: one workplace in each of schools and food manufacturing sectors for each country consistently scores more highly than the other for QWE.

**Table 2. Quality of work environment** 

Workplace		Total work environment	Workload & stress	QWE index	No.
Hospitals/aged care facilities					
	DkA	25.8	28.4	27.1	93
	DkB	33.0	31.5	32.3	37
	NZA	35.0	24.2	29.6	6
	NZB	33.3	26.3	29.8	19
Food Manufacturing	DkC	26.2	27.3	26.8	66
	DkD	22.3	21.4	21.9	53
	NZC	22.5	17.2	19.9	13
	NZD	27.5	22.2	24.9	17
Schools	DkE	29.0	27.9	28.5	10
	DkF	24.4	23.9	24.2	41
	NZE	32.0	15.5	23.8	23
	NZF	24.2	11.3	17.8	26

# **Direct Participation (DP)**

Table 3 summarises survey results for each workplace for each dimension of direct participation, with the two highest scores in each dimension highlighted. These results are more mixed than for QWE. The highest ranking overall index scores were attributed to one Danish hospital ward (DkA) and one Danish school (DkE), but other Danish and NZ workplaces in these sectors scored well in most categories. In the overall index for direct participation all four food manufacturing workplaces ranked lowly, which again may indicate industry characteristics. The health and education employees were professionals or paraprofessionals whose work offers greater opportunities for direct participation than in manufacturing.

**Table 3. Direct Participation** 

Workplace		Influence work load	Influence work arrangement	Information from mgmt	Learning possibilities	DP index
Hospitals/a	aged care					
facilities	DkA	21.9	29.5	27.6	34.9	28.5
	DkB	21.8	27.7	27.7	33.1	27.6
	NZA	20.0	31.7	30.0	26.7	27.1
	NZB	19.4	27.9	31.1	34.2	28.2
Food Manufac	cturing					
	DkC	15.2	20.2	20.3	17.7	18.4
	DkD	17.2	23.0	16.4	24.2	20.2
	NZC	23.6	27.5	16.2	27.7	23.8
	NZD	18.8	26.9	22.4	20.6	22.2
Schools	DkE	24.0	31.0	30.0	29.0	28.5
	DkF	24.1	29.3	19.8	29.0	25.6
	NZE	24.8	27.4	24.8	31.3	27.1
	NZF	20.4	31.9	25.0	29.6	26.7

#### **Conclusions**

Table 4 summarises the results by ranking workplaces for DP and QWE, and allocating workplaces to different ideal types of representative participation. The workplaces are ranked in order of their QWE scores.

The results show a high correlation between representative participation type and both DP and QWE rankings. Four of the top five ranked workplaces in terms of both QWE and DP are classified democratic for representative participation. This indicates a high degree of correlation between QWE and both forms of participation, as well as significant correlation between DP and REP themselves. In addition, in both Denmark and NZ the schools classified as democratic ideal types for REP were also ranked higher for both DP and QWE than the schools classified as formal regulatory. These results indicate significant confirmation for our original hypothesis, that effectiveness of employee participation correlates positively with QWE. Further, the results confirmed that the correlation between these two variables tends to be stronger where the depth or range of employee participation is greater. This was also confirmed at a national level, with Danish workplaces occupying four of the top six QWE rankings out of 12, and having the highest ranked workplace for QWE in each industry sector: even where Danish workplaces are classified as formal regulatory ideal types for REP, their range of employee participation is greater, and this correlates with QWE rankings.

However, whilst participation plays a critical role, it appears that some other factors do also. One seems to be industry sector. Health sector workplaces occupy the top three and fifth rankings for QWE. Furthermore, NZB is the only case of high QWE ranking with an ideal type of REP that is not classified as democratic (HRM), although even in this case DP is ranked highly. We have noted that the health industry is likely to be focussed on health issues associated with QWE. At the other extreme, three of the four schools are ranked lowly for QWE. The exception is DkE, which is also ranked first for DP and is classified as democratic for REP. However, NZA which is also classified as democratic for REP and ranked quite highly for DP, is still ranked lowly for QWE. We have acknowledged changes in schools in both countries that have contributed to high levels of workplace stress, and it seems that participation cannot always overcome such industry trends. Secondly, in the case of both health and schools, we have referred to the professionalism of the workforce as a contributor to relatively extensive REP and DP in most cases (4 health; 2 schools). Thirdly, the relative importance of REP and DP impacts on QWE outcomes may also be an issue. We have only one instance where there is a clear disparity between the two forms of participation: one NZ aged care facility (NZB) is classified as HRM for REP type, but ranks very highly for DP and QWE. This suggests that DP was more important in determining QWE, especially since the only other HRM classified workplace for REP, a NZ food manufacturing plant (NZC), was ranked lowly for both DP and QWE. However, the sample is too small to draw strong conclusions here, and it is difficult to disentangle different variables relating to participation and industry sector. As this case indicates, the results are likely to have been affected by workplace specific factors. These complexities warrant further examination.

**Table 4. Summary of results** 

workplace	Representative participation type	DP rank	QWE rank
DkB hospital	democratic	4	1
NZB aged care facility	HRM	3	2
NZA aged care facility	democratic	5	3
DkE school	democratic	1	4
DkA hospital	democratic	1	5
DkC food manufacturing	formal regulatory (a)	12	6
NZD food manufacturing	hybrid HRM/formal regulatory	11	7
DkF school	formal regulatory (a)	8	8
NZE school	democratic	5	9
DkD food manufacturing B	formal regulatory (a)	10	10
NZC food manufacturing	HRM	9	11
NZF school	formal regulatory (b)	7	12

#### References

- Arthur, J. B. (1994). Effects of Human Resource Systems on Manufacturing Performance and Turnover. *Academy of Management Journal*, *37*(3), 670-687.
- Boxall, P., Haynes, P. & Macky, K. (2007), 'Employee Voice and Voicelessness in New Zealand', in R. Freeman, P. Boxall & P. Haynes (eds), *What Workers Say. Employee Voice in the Anglo-American Workplace*, Cornell University Press, Ithaca NY: 145-65.
- Delaney, J. T., & Huselid, M. A. (1996). The impact of human resource management practices on perceptions of organizational performance. *Academy of Management Journal*, 39(4), 949-969.
- Doucouliagos, C. (1995). Worker Participation and Productivity in Labor-Managed and Participatory Capitalist Firms: A Meta-Analysis. *Industrial and Labor Relations Review,* 49(1), 58-77.
- Fairbrother, P. (1996). Organize and Survive: Unions and Health and Safety A Case Study of An Engineering Unionized Workforce. *Employee Relations*, 18(2), 5 88.
- Feinberg-Danielli, G. and Lafferty, G. (2007), 'Unions and union membership in New Zealand: Annual review for 2005', *New Zealand Journal of Employment Relations*, 32(3): 31-39.
- Food and Beverage Taskforce (2006), Food and Beverage Sector Engagement Strategy, 2005-2006, Wellington: NZ Trade and Enterprise.
- Harris, P. (2004), 'From Health & Safety to Employee Participation? The Impact of the NZ Health & Safety in Employment Amendment Act (2002)', *International Employment Relations Review*, 10(1), 1-12.
- Knudsen, H. (1995), *Employee Participation in Europe*, Sage, London.
- Knudsen, H. Busck, O. & Lind, J. (2009). *Medarbejderdeltagelsens betydning for arbejdsmiljøets kvalitet. Rapport fra Medea-projektet.* Skriftserien 9. Institut for Samfundsudvikling og Planlægning, Aalborg Universitet.
- Markey, R., Hodgkinson, A. Mylett, T., & Pomfret, S. (2001). *Regional Employment Relations a Work. The Illawarra Regional Workplace Industrial Relations Survey.*Wollongong: University of Wollongong Press.
- Meyer, J., & Topolnytsky, L. (2000). Building and maintaining employee commitment: implicationsfor HRM policy and practice. In A. Travaglione & V. Marshall (Eds.), *Human Resource Strategies: An Applied Approach.* Sydney: McGraw-Hill.
- Saksvik, P., & Quinlan, M. (2003), 'Regulating systematic occupational health and safety management: comparing the Norwegian and Australian experience', *Relations Industrielles*, 58(1): 33-56.
- Visser, J. (compilation) (2009). The ICTWSS Database: Database on Institutional Characteristics of Trade Unions, Wage Setting, State Intervention and Social Pacts. AIAS University of Amsterdam: Amsterdam Institute for Advanced Labour Studies.
- Walters, D. (2004). Workplace Arrangements for Worker Participation in OHS. In E. Bluff, N. Gunningham & R. Johnstone (Eds), *OHS Regulation for a Changing World of Work* (pp. 68 93). Sydney: Federation Press.
- Walters, D., Nichols, T., Connor, J., Tasiran, A. & Cam, S. (2005). *The role and effectiveness of safety representatives in Influencing workplace health and safety.* Research Report 363. London: UK Health and Safety Executive.