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# Is Finland Different? Quality of Work Among Finnish and European Employees

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The issue of the quality of work-life has risen in popularity due to concerns about the economic and social sustainability of European societies. Throughout the continent, global competition, technological change and the intensification of work are common developments which are seen to affect the well-being of the workforce. Nevertheless, European countries differ substantially in terms of job quality. According to earlier research, employees in Sweden and Denmark (and to lesser extent in Finland) report a higher quality of work tasks than elsewhere in Europe. The aim of this paper was to investigate, in a cross-national context using multivariate techniques, whether job quality in Finland really is divergent from that of other Nordic countries and rest of the Europe. Empirical analyses were based on the fourth wave of the European Working Conditions Survey (EWCS) collected in 2005. In this study we used data from the 25 Member States of the European Union and Norway (n=21,196 interviews). Our results support earlier findings that Finland lags behind other Nordic countries in terms of work discretion and the perceptions of being well paid. Instead, Finnish employees were less worried about health issues. When comparing Finland to Scandinavia, we did not find major differences in the amount of highly skilled jobs, insecurity nor the quantity of jobs requiring great effort. We also examined the associations of the dimensions of job quality to job satisfaction. The results indicated that the subjective aspects of job quality were more important determinants of job satisfaction, and that there were only modest differences in the determinants of job satisfaction between country clusters.

*Keywords: job quality, comparative study, job satisfaction, Europe, working conditions.*

## Introduction: The Scandinavian difference

The quality of working life is again, after a quantitative and employment-centred era, a hot topic in Europe. The quality improvement became an explicit objective of the European commission at the Lisbon meeting in 2001. In addition, the OECD, with a labour market policy for “more and better jobs”, and ILO, with its concept of decent work, are both laying more stress on the qualitative aspects of work-life.

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The driving forces behind the job quality goal becoming a priority issue in the European Employment Strategy are partly global and partly unique to Europe. In the global context it is associated with economic restructuring and especially with the expansion of the service sector, the reorganization of work and the resultant increase in non-standard forms of employment. Due to high employment rate targets, there were also fears within Europe about a quantitative job creation race between member states, that were seen as detrimental to job quality (Goetschy, 2002; Smith et al., 2008). In the discussion revolving around the European Employment Strategy, commonly mentioned interests attached to the quality of work are reacting to an ageing workforce and lifelong learning in a knowledge-based economy, and the advantages of improving worker health and well-being (Lowe, 2003).

Besides the macro-level political and economic interests, researchers have emphasized that quality of work affects both employees' well-being and organizational performance. Earlier research has shown that a worker's quality of work-life has an impact on employee organizational identification, job satisfaction, job involvement, job effort, job performance, intention to quit, as well as on the organization's turnover (Sirgy et al., 2001). Thus, job quality also has strategic importance that affects organizational performance. In addition

to what happens in the workplace, the long arm of work extends beyond required work hours and into the private sphere and contributes in various ways to a worker's social identity and to other life domains such as family life, leisure, and social life.

In previous comparative studies Nordic countries have proven to be distinctive from other European countries in terms of the quality of their work-life. Workers in Nordic countries report for example a higher quality of work tasks and better opportunities for participation in decision making compared to other European countries (Gallie, 2003). Moreover, Nordic countries seem to score high in self-development opportunities and learning at work (Green, 2006; Parent-Thirion et al., 2007).

The higher quality of work in Nordic countries is an interesting but also an ambiguous phenomenon. A macro-level explanation is sought with respect to how a society is situated within the (production) regime map. Nordic countries are defined as social-democratic, coordinated market economies, characterized by market forces which are modified and supplemented by agreements between the major interest groups of society, while other countries on the production regime map are seen as having liberalist economies that are driven by market forces (Gallie, 2007a; Gustavsen, 2007; Lorenz & Valeyre, 2005).

The same description applies to all the industrial relations; Nordic governments have a history of cooperating with social partners in order to improve work conditions by specific programmes and initiatives that emphasize the enrichment of job tasks, greater autonomy over how to carry out the job and increased involvement in decision-making (Gallie, 2003; Peña-Casas & Pochet, 2009). According to Gustavsen (2007) and Valeyre et al. (2009) learning-oriented forms of work organization are more widely applied in the Nordic countries than is generally done in Europe. Learning entails autonomy in work and trust between employers and employees. Interestingly, some studies have previously noted that, among the Nordic states, job quality is generally lower in Finland compared to other countries in the group (Gallie, 2003; Peña-Casas & Pochet, 2009).

In this paper, we analyze and interpret variations in some key job quality indicators in Finland, in Nordic countries and in other European countries. Our main research question is whether job quality in Finland is comparable with other Nordic countries and how these northern countries differ from other European countries.

The paper is organized as follows. In the next chapter we elaborate the 'umbrella concept' of job quality broken down into six key components, which we have selected to be included in the empirical analysis. The third section presents the data, the methodological choices and the key variables. The fourth section compares firstly, in a descriptively, the different empirical indicators of job quality between country groups. Thereafter, we employ a multivariate analysis to examine more closely the relations of job quality indicators and the enlarged job satisfaction sum variable.

## Dimensions of job quality

In the social sciences the approaches to study of job quality vary according to the discipline. Economists tend to focus on economic rewards such as pay and fringe benefits. Sociologists have concentrated more on social stratification deriving from the division of labour as well as on the control and autonomy workers have in their jobs. In the sociological tradition the concept of skill is central. Psychologists tend to put more emphasis on the non-economic aspects of work and their focus is commonly on the intrinsic dimensions of jobs and on the variety of psychological sources of job satisfaction. These traditions tend to trust different measures of job quality. Economists rely mainly on objective measures, such as wages. As many psychologically and sociologically relevant dimensions are of a qualitative and subjective nature they are seen as being problematic to measure accurately (Dahl et al., 2009; Green, 2006; Kalleberg & Vaisey, 2005).

A central methodological choice in assessing overall job quality is to decide whether to use a multidimensional approach with a variety of measures or to ask job holders to provide a general or global assessment of their job (Dahl et al., 2009; Kalleberg & Vaisey, 2005). This study follows the tradition of the multidimensional approach to job quality. We employ both objective and subjective measures of job quality dimensions, which can be found in recent literature on job quality. The list of dimensions includes skills, work effort, autonomy, job (in)security, pay and job satisfaction.

**Skills** The scenarios of the changing nature of work suggest that in the knowledge-based economy an intrinsic orientation is likely to become an increasingly important factor for economic performance. Knowledge-based work is difficult to regulate through traditional forms of mechanized or technical control. That makes employers dependent on their employees' good will and commitment, in other words their intrinsic motivation (Gallie, 2007c; Green, 2006, 26-7). Empirical research supports the upskilling argument and shows that in industrialized countries, the requirements of jobs, as well as educational levels and qualifications for work, have been rising (Felstead et al., 2007; Lehto & Sutela, 2005; Tählin, 2007). However, there are also tendencies toward the polarization of skills and the mismatch of job requirements and the qualifications of job holders (Green, 2006).

There are some theoretical arguments in favour of societal differences in production systems that would differentiate economies according to their emphasis on policies regarding the improving of the quality of working life while creating work conditions that are conducive to an intrinsic orientation to work and skill development (Gallie, 2007c). The 'varieties of capitalism' literature highlights employers' strategies and national labour market regulation (Hall & Soskice, 2001). Compared to 'liberal market economies', the 'co-ordinated market economies', like the Nordic Scandinavian countries and Germany, place a stronger emphasis on skill development and quality of production. Presumably in these countries employees attach particular importance to the

intrinsic characteristics of work (Gallie, 2007c).

If there are differences between co-ordinated and liberal market economies in the production systems and in the skill orientation of both employers and employees, we should therefore find a higher emphasis on intrinsic job qualities among Nordic respondents.

In the 'Employment in Europe 2008' report European Union member states are mapped into job quality regimes. The so-called Northern regime (including Nordic countries and the UK) is characterized by high wages, good working conditions, high work intensity as well as high educational attainment and participation in training (European Commission, 2008). Training is an important factor of job quality as it creates greater opportunities for internal or external professional mobility, and for finding a new job in case of dismissal, and thus it increases general employability (Parent-Thirion et al., 2007; Peña-Casas & Pochet, 2009).

**Work effort** Growing work related pressures as a threat to worker well-being have come to the fore of debates regarding the quality of work-life. The use of new technology and its consequent heightened demand on workers to keep up with skill requirements combined with insecurity are seen as factors increasing work pressure (Gallie, 2005). Moreover, the shifts in the structure of the economy, specifically the growth of the service sector, have resulted in changes in the determinants of the pace of work. Industrial constraints, for instance the pace of work being determined by the automatic speed of a machine, have been replaced by direct market constraints, such as direct demands from people (Parent-Thirion et al., 2007). In a Finnish quality of work-life survey respondents chose time pressure and tight time schedules as the most important factors that make their work less enjoyable. An enforced fast pace at work was the fifth most disturbing factor (Lehto & Sutela, 2005). This phenomenon, termed work intensification, which according to Green (2006) has its roots in effort-biased technological and organizational changes, is a critical factor behind changes in overall job satisfaction.

For Green (2006, 46), work effort "is the rate of physical and/or mental input to work tasks during the work day". Measurement of "input" in a person's work is ambiguous. Objective measures, such as work hours, do not necessarily catch the tempo of work during the time spent at work. Subjective measures, like perceptions about rising pressure or pace, are difficult to separate from more general feelings about the intensification of the pace of life. Reporting how busy one is can also be socially desired (Gershuny, 2005).

**Autonomy** Autonomy is the extent to which workers can influence their work. It is a central role in the sociology of work as it is closely linked to work effort and skills. Autonomy at work and the level of a person's skill correlate strongly. However, the possession of skills and the use of skills do not necessarily guarantee high worker discretion (Dahl et al., 2009). With work demands the autonomy aspect forms the core of the psycho-social models of workplace well-being. Low latitude

for decision-making and high demands at work is a combination that potentially increases levels of stress (Karasek & Theorell, 1990). Loss of employee discretion has also been found to be detrimental to work satisfaction and subjective well-being at work (Green 2006). In the Finnish Quality of Work-life survey respondents chose independence at work as the most important factor that makes their work more enjoyable. (Lehto & Sutela, 2005, 84).

Some evidence has been found on how national employment systems have an influence on worker autonomy. Nordic countries have been proved to have relatively high levels of employee discretion. This is explained by Nordic countries having skill-oriented employment systems, which offer but also require large employee responsibility and the capability to autonomously solve problems (Dahl et al., 2009; Gallie, 2007a). Employee discretion varies with managerial cultures. The quality of work-life policies adopted from the 1970's onward in Sweden and to lesser extent in other Nordic countries included efforts in the re-designing of jobs in order to enrich them (Green, 2006).

**Pay** Pay is often left out of the debate by social scientists, although it is an important extrinsic reward affecting job quality. Pay should be perceived as fair in comparison to a worker's contribution to an organization (Green, 2006, 112). Rising wage discrepancies can be considered as a sign of the declining quality of work-life if they do not follow workers' assessments of equal contribution to a company's production. The gender wage gap is a crucial indicator of the quality of work-life. Nevertheless, comparing wages in social surveys is somewhat problematic. The problem facing international surveys is how to make the scales meaningful in each country (one way is to adapt them to national pay levels) and also comparable internationally.

**Job insecurity and the health of workers** At the most basic level, job security is a matter of having a job or not. Work is important to well-being, not only because of the income but it also because it gives opportunities for self-actualization and provides structure to a person's life (Paugam & Zhou, 2007). Moreover, work enhances available resources and connects individuals to their social environments (Barnett & Hyde, 2001). Ambiguity related to the future of a job is a significant source of stress. In some studies the psychological consequences of uncertainty have been found to be relative to actual unemployment (redundancy) (Green, 2006, 129; Julkunen, 2008, 115). Therefore, having permanence and future prospects in a job are essential for the well-being of workers.

One can take several approaches to measuring job insecurity. The OECD has placed an emphasis on job tenure by revising how long people have stayed with the same employer (Paugam & Zhou, 2007). The prevalence of non-standard employment contracts, especially fixed-term contracts has been used as an indicator of insecurity since they do not provide the same future prospects that indefinite contracts do. Both of these 'objective measures' are problematic

since they do not reveal whether resigning from a job and temporary jobs are involuntary or positive in terms of career advancement.

A possible method for gauging uncertainty is to ask how employees themselves perceive the future, whether they fear losing their jobs. Several aspects of insecurity may be reflected in their subjective perceptions; those related to the market situation or to labour market regulations that allow employers to dismiss their employees or protect employees (Gallie, 2003; Paugam & Zhou, 2007); employees' fear of not being able to cope with the growing demands of work (Lehto & Sutela, 2005, 68); insufficient communication about organizational changes (Lehto, 2009) or previous unemployment experiences (Green et al., 2001).

Insecurity in one's work can be extended to health aspects. Health is an important factor of job quality since it is, alongside skill and time, a central component of a worker's capital that is exchanged for salary. Fear of losing one's health is a considerable risk. The measurement of health and safety at work has had inadequacies. For example the Laeken indicators of job quality include only one indicator, the rate of serious accidents at work. However, a number of important variables, such as occupational diseases, stress at work and work intensity are lacking (European Commission, 2008).

**Job satisfaction** According to Green (2006) the five above mentioned dimensions of job quality are in fact components of job satisfaction. Green's view resembles that of Sirgy's collegium (2001); job satisfaction is one possible outcome of the quality of work-life. In other words, where employees are in jobs with lower skill levels, with less discretion over how they do their work, where there are fewer training opportunities and less security they are also significantly less satisfied with their work (Gallie, 2007b). For the purpose of comparative study, this picture might be too simplistic. Green & Tsitsianis (2005) found that patterns of what accounts for changes in job satisfaction are not universal. In Britain work effort and task discretion could explain declining satisfaction whereas in Germany it was more of a question of a match between desired and actual work hours (although the connection was very modest). In neither country was job insecurity able to account for declining job satisfaction. In Sousa-Poza and Souza-Poza's (2000) study the effect of having a (self-perceived) high paying job was, for example, insignificant in Great Britain and Denmark. In contrast, the importance of high income was significant in Eastern European countries (see also Wallace et al., 2007). Having an interesting job and good relations with the manager had the most positive effects in Denmark. Gallie (2007c) finds similar results and explains the variation in terms of different job orientations.

### Aims and methods

The aim of this paper is to investigate if Finland is really different as Gallie (2003) and Peña-Casas & Pochet (2009) have pointed out. We are interested to see whether these dimensions of the quality of work-life are perceived similarly or differently by workers in Finland and in other Nordic

countries. Other European countries are kept in the analysis for the purposes of comparison and to assess the level of differences between country clusters. In what respects does Finland relate to Scandinavia in its workers' experiences and in what aspects does Finland relate more to other European countries?

The objective of the present study is essentially exploratory. It seeks to find Finland's position on the scale for the perceived quality of work-life. Specifically, we will examine six key areas regarding the quality of work-life including intrinsic, subjective aspects such as the skills content of jobs, the intensity and discretion of work and job satisfaction, as well as more extrinsic features like pay and job security, both in terms of job stability and health at work.

The second objective is to construct an indicator of job satisfaction (often seen as an important indicator of job quality) and explore how the above mentioned aspects of job quality are associated with our measure of job satisfaction. Our strategy is to include both objective and subjective indicators of job quality in the analysis. Regression analyses are conducted separately for each country group to observe whether these connections are similar or divergent in these country clusters.

### Data and methods

Empirical analyses are based on the fourth wave of the European Working Conditions Survey (EWCS) collected in 2005. In this study we use data from the 25 Member States of the European Union and Norway (n=21,196 interviews). In each country, a multi-stage, stratified and clustered design was used with a random walk procedure for the selection of respondents for the last stage. The respondents were interviewed face-to-face in their homes outside normal working hours. The overall response rate was 48 percent. Data has been weighted to correct for the non-response. The post-stratification weight is constructed to match the European Labour Force Survey figures by using gender, age, occupation, sector and region. In addition we use cross-national weight for Scandinavia and other EU25 states, which assigns to each country an importance in the overall sample which corresponds to its proportion of the overall EU25 employed population.

We have grouped the EU25 countries into three groups to make comparisons easier: Finland, Scandinavia (Denmark, Sweden and Norway) and all other EU25 states. In the article we employ various statistical methods to study similarities and differences in job quality dimensions between selected country clusters. Percentage distributions, mean values and graphs are used to illustrate differences in the levels of job quality. To investigate whether possible country differences in the aspects of job quality remain after controlling for socioeconomic and structural factors, we employed a logistic regression where the effects of age, gender, occupation, industry, sector and country are controlled. To study the relationship between job quality factors and job satisfaction we used a regression analysis. The study applies a range of covariates. In the regression analysis the impacts of covariate

variables (gender, age, occupation, marital status and children) to job satisfaction are controlled.

### Measures

As there is no such single construct as quality of work-life, it is necessary to “deconstruct the concept” into its measurable components. In our analysis we will follow key dimensions of job quality as outlined by Green (2006). In order to address the quality of work-life in a coherent and structured manner both subjective and objective indicators were chosen to help illustrate the aspects of job quality. All measures are presented in Table 1.

To capture the level of job requirements, an index summarizing the use of different cognitive skills was created. From the survey we included three questions about whether or not a respondent’s job involves solving unforeseen problems on their own, complex tasks and learning new things. The skill index was formed by counting together how many different types of skill demands a respondent’s job includes and the score ranges from 0 to 3. The mean score of the skill index (job content) was used for the regression analysis. For country comparisons and the logistic regression respondents were counted as working in high skilled jobs, if their jobs included all the above mentioned aspects of skill demands (skill index score 3). For comparative analysis training was chosen as the objective measure of skill to be assessed with regard to the proportion (%) of workers who received training paid by an employer in the year prior to the survey. The regression analysis training index was composed by counting together how many different types of training an employee had participated in. The respondents were given options such as “training paid by your employer or yourself, on-the-job training provided by supervisors and co-workers or other forms of learning”.

The questionnaire included three indicators which describe perceived autonomy, that is, a worker’s own influence and control over the work process. They were asked whether or not they are able to choose or change the order of their tasks, the methods of work and the speed or rate of work. A composite index was constructed that counted how many questions a respondent answered ‘yes’ to (i.e. an indicator represents values as measured from a low of 0 to a high of 3). The mean score of this autonomy index was employed for the regression analysis. For country comparisons and the logistic regression employees were defined as having ‘high discretion’ if they reported being able to influence to all three aspects of autonomy in their work (and thus had a score of 3).

To describe the subjective experiences of the intensity of the work workers were asked to evaluate to what extent their job required ‘working at very high speed’ and ‘working to tight deadlines’. Together these two questions form an effort indicator with a range of 1 to 7 values, which was recoded (the higher the score the more hurried the work felt). The Alpha reliability coefficient for the scale was 0.76. A mean score of effort index was used for the regression analysis. For country comparisons and logistic regression the effort

index was recoded in order to make it dichotomous by using a scale-midpoint split. In other words, the respondents evaluating that they were working  $\frac{3}{4}$  of the work time (or more) at very high speed and to tight deadlines were grouped in ‘high effort’. As an objective indicator of job effort we used the length of work hours. Individuals were asked to estimate how many hours on average they work per week in their main paid job (values ranged from 1 to 168). A mean of work hours was employed for country comparisons and for the regression analysis.

The subjective perception of insecurity is simply measured with one question ‘I might lose my job within the next six months’. For country cluster comparisons and logistic regression we defined workers as insecure if they had agreed or strongly agreed with the above mentioned statement. For multivariate analysis a mean score from 1 to 5 was employed, which showed that the higher the mean the more insecure the respondent was. As an objective measure of job insecurity used in country comparisons and regression analysis we chose to use the amount (%) of non-standard contracts. The non-standard contracts (fixed term contracts, temporary employment agency contracts, apprenticeships or other training schemes, no contract and other) group respondents were those said be working with something other than an indefinite contract.

As a subjective indicator of health, the evaluation of whether respondents think their health and safety is at risk because of work was utilized. Respondents answering yes were counted as employees that were worried about their health and they were used for country comparisons and logistic regression analysis. An ‘objective’ measure of work related risk was constructed from questions concerning exposure to different risks related to work and the work environment. A mean index included ten items: vibrations, noise, high and low temperatures, breathing smoke or vapours, handling chemical products, radiation, tobacco smoke and handling infectious materials. The mean score of the risk index was used throughout the study.

How workers perceived how fair the pay they received from their work input was reflected in the answers to ‘I am well paid for the work I do’. The percentages of employees, who had agreed or strongly agreed to the statement of being well paid, were counted as ‘well paid’ for country comparisons and the logistic regression. For the regression analysis of pay satisfaction a score representing the mean from 1 to 5 was used (the higher the mean the fairer the respondent perceived his remuneration). As an objective measure of income we employed information provided by the question which asked where the respondents would position their usual monthly earnings in their main paid job on a 10-point scale. The scale was constructed by dividing the earnings of each EU country into deciles. The scale for each country represents the real distribution of earnings and thus provides a tool for comparative study (Parent-Thirion et al., 2007).

The index of job satisfaction included five questions. The questions concerned satisfaction with working conditions, the opportunity to do what one does best, the job providing the feeling of work well done, the ability to apply one’s own

ideas in work and the feelings of doing useful work. Because the variables were on different scales they had to be standardized before constructing the index. The internal consistency of the scale was good (Chronbach's alpha = 0.76).

## Results

### *Job quality in Finland, Scandinavia and Europe*

In the following chapters we present explorative results on the differences between country clusters regarding the dimensions of job quality. In Figure 1 the dimensions of job quality are compared by country cluster.

**Finnish work-life offers the possibility to use and develop work skills** Finland and Scandinavia seem to be very similar in terms of the amount of jobs with high skill requirements since 60 percent of the employees reported that their jobs involved solving unforeseen problems on their own, complex tasks and learning new things. The high skill requirements were found to be more common for male employees in all country clusters. The difference in the quantity of men and women in requiring jobs is smallest in Scandinavia (women 60%, men 64%) and wider in Finland (women 57%, men 66%) and in other European countries (women 40%, men 49%).

The skill index is based on workers' subjective evaluations of their job requirements. Access to training is a more objective measure of the possibilities for skill development and learning at work. The high participation rate of Finnish employees in training paid for by employers has been reported in previous studies (e.g. Gallie 2003) and the EWCS data confirms these results. Finland has the highest proportion of workers (55 % of all employees) who report having been offered training during the past year. Around 60% of Finnish female employees reported being in training, which was double the European average (29%). Smaller share of Scandinavian employees (45 %) had been in training than Finns on average but what is common to all Nordic countries is that more women than men participated in training, whereas elsewhere in Europe the gender difference was not as significant (women 28,6%, men 28,8%). The perceived usefulness of the training was not assessed in the EWCS questionnaire.

**Scandinavians take the lead in autonomy** Based on the previous discussion of this paper, so called new models of work organization, which embrace autonomous teams and multi-skilling, are rather established in Northern countries. As expected, in Scandinavian workplaces employees report having a high level of control over their tasks (Figure 1). In general, Finnish employees report less discretion (51% have high autonomy) over how to accomplish their duties than Scandinavians (60%). In the EU worker discretion is granted to significantly fewer employees (43%) and indicates that more traditional methods of managing and organizing work are present there. Surprisingly, the EU average shows that more women (45%) than men (41%) report high autonomy, while in Nordic countries it is more common for male

employees (men 64%, women 55%). The gender gap in the amount of employees having high discretion is the lowest in Finland (men 52%, women 51%).

**The long and intense work hours of Finnish Women** The effort index, which compressed together the measures of working at high speed and to tight deadlines, differences between country clusters emerged (Figure 1). In Finland (48%) and Scandinavia (46%) more employees report higher levels of effort than elsewhere in the Europe (36%). It was significant that among Finnish women more than half (54%) report working under hurried circumstances, whereas the same level of effort is reported by only 42 % of men. The difference between the genders is narrower in Scandinavian (men 47%, women 45%) and in other European countries (men 36%, women 33%) where male employees often experience more pressure than females.

Using the average work hours per week as an objective measure of effort, it can be said that Scandinavians work the least (36,3h), and that women work less than men in all country clusters. What is notable, is that Finnish women work longer hours, over 35 hours per week, (and face greater pressure) than their Scandinavian counterparts (33 hours per week). The work hours of women make up the difference between the length of total work hours between Finland and Scandinavia since there is no divergence between the hours of men (over 38 h). Elsewhere in Europe women work 33 hours and men 40 hours per week on average.

**Contradictions concerning job security and safety** On average in the EU27, 12% of employees work under fixed-term contracts (Parent-Thirion et al., 2007). In our analysis we did not restrict the scope to fixed term contracts. The index of non-standard contracts also includes those working through temporary employment agencies, and as apprentices or without a contract. Comparing Finland (men 16%, women 23%) to Scandinavia (men 14%, women 17%) reveals that non-standard contracts are more prevalent in Finland for both men and women. Among Finnish employees, every fourth female reports working under something other than an indefinite contract. Still, this "objective insecurity" is not directly reflected in the subjective perceptions. Only less than every tenth female employee is worried that she might lose her job in the near future. Although as many as 25 percent of European and 23 percent of Finnish women have non-standard contracts, only 14 percent of European and 12 percent of Finnish women feel insecurity. The same interesting difference is displayed across country clusters; levels of insecure employees are lower than the amount of workers working under something other than indefinite contracts.

A comparison of subjective perceptions of health being at risk because of work and exposure to health risks stemming from a work environment give an interesting and contradictory picture of health concerns. Scandinavians are rather concerned over the consequences work might have for their health (Figure 1), although there has been significant workplace safety programs and measures in these countries. Ev-

Table 1  
*Measures of job quality.*

Items in EWCS 2005	Scale	Indexes and indicators
<b>SKILLS</b>		
<i>Subjective:</i> “Does your job involve...” C. Solving unforeseen problems on your own? E. Complex tasks? F. Learning new things?	Yes (1) – No (0)	<i>Skill index (job content)</i> - scale 0 to 3
<i>Objective</i> “Over the past 12 months, have you undergone any of the following types of training to improve your skills or not?” A. Training paid by your employer B. Training paid by yourself C. On the job training D. Other forms of on-site training and learning E. Other	Yes (1) – No (0)	<i>Training index</i> - scale 0 to 5
<b>AUTONOMY</b>		
“Are you able or not, to choose or change..” A. your order of tasks B. Your methods of work C. Your speed or rate of work	Yes (1) – No (0)	<i>Autonomy index</i> -scale 0 to 3  <i>High autonomy dummy</i> - autonomy index score 3
<b>INTENSITY</b>		
<i>Subjective</i> “Does your job involve...” A. working at very high speed B. working to tight deadlines	1. All of the time 2. Almost all of the time 3. Around ¾ of the time 4. Around half of the time 5. Around ¼ of the time 6. Almost never 7. Never.	<i>Effort index (mean)</i> -scale 1 to 7 - Chronbach’s $\alpha=0.76$  <i>High effort dummy</i> - working ¾ of the work time (or more) at very high speed and under tight deadlines.
<i>Objective</i> How many hours do you usually work per week in your main paid job?		
<b>PAY</b>		
<i>Subjective</i> “I am well paid for the work I do.”	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	<i>Well paid dummy</i> - agree or strongly agree with the statement
<i>Objective</i> “Presently, what is on average your net monthly income from your main paid job?”	Country level income deciles	

ery third Scandinavian say that they think their health is at risk, where as elsewhere in Europe same answer is given by every fourth (25%). Nevertheless, looking at the levels of exposure to health risks such as fumes, noise and chemicals it is clear that Europeans (3.5) report higher levels of exposure than Scandinavians (3.0). In other words, Scandinavian employees are more concerned about their health at work, although they seem to be less exposed to health risks at their workplaces. In this respect Finland diverges from Scandinavia, since Finns are less concerned over the consequences work might have for their health (23%), although the actual

exposure risk index (2.9) is similar to the rather low level found amongst Scandinavians.

**Scandinavian men receive fair pay** There is considerable variation between country groups that can be noted with regard to the perception of being well paid. Finnish employees seem to be significantly less satisfied with the match between their work input and the pay they receive than employees elsewhere in Europe. In Finland only about a third of employees (32%) consider their jobs to be well paid, whereas nearly half of the respondents have similar opinions in Scan-

Table 1  
*Continued.*

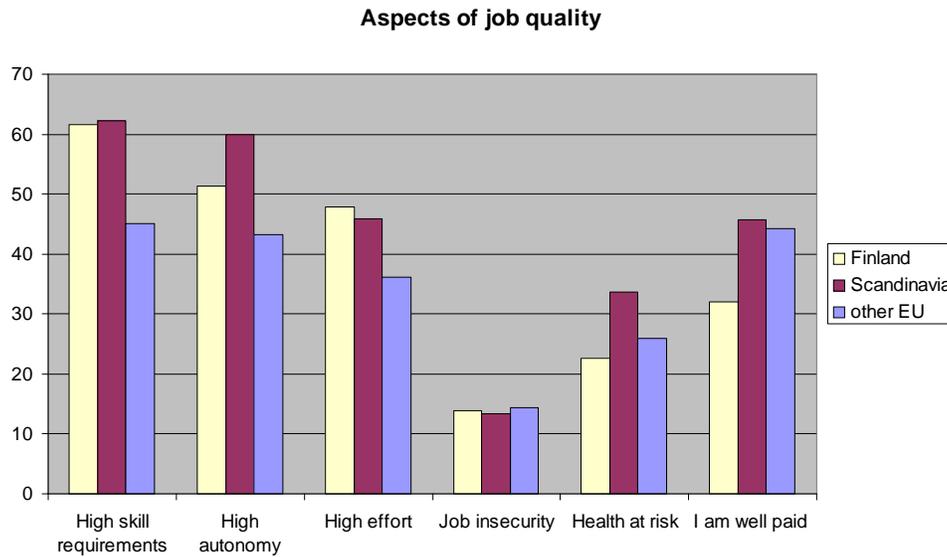
Items in EWCS 2005	Scale	Indexes and indicators
<b>INSECURITY</b>		
<i>Subjective</i>		
“I might lose my job in the next 6 months.”	1. Strongly disagree 2. Disagree 3. Neither agree nor disagree 4. Agree 5. Strongly agree	<i>High insecurity dummy</i> - agree or strongly agree with the statement
<i>Objective</i>		
“What kind of employment contract do you have?”	1. indefinite contract 2. fixed term contract 3. temporary empl. agency contract 4. apprentic. or other training scheme 5. no contract	<i>Insecurity index</i> - scale 1 to 5
<b>HEALTH AND SAFETY</b>		
<i>Subjective</i>		
“Do you think your health is at risk because of your work?”	Yes (1) – No (0)	<i>Health at risk dummy</i> - Health at risk = yes
<i>Objective</i>		
“Are you exposed at work to . . .”		
A. Vibrations	1. All of the time	<i>Health risks index (mean)</i> - scale 1 to 7 - Chronbach’s $\alpha=0.86$
B. Noise	2. Almost all of the time	
C. High temperatures	3. Around ¾ of the time	
D. Low temperatures	4. Around half of the time	
E. Breathing in smoke, fumes, powder or dust	5. Around ¼ of the time	
F. Breathing in vapours	6. Almost never	
G. Handling chemical products	7. Never.	
H. Radiation		
I. Tobacco smoke		
J. Infectious materials		
<b>JOB SATISFACTION</b>		
“On the whole, how satisfied are you with the working conditions in your main paid job?”	1. not at all satisfied 2. not very satisfied 3. satisfied 4. very satisfied	<i>Index of job satisfaction (mean)</i> - standardized items (z-scores) - Chronbach’s $\alpha=0.75$
A. At work, you have the opportunity to do what you do the best	1. Strongly disagree 2. Disagree	
B. Your job gives you the feeling of work well done	3. Neither agree nor disagree	
C. You are able to apply your own ideas in your work	4. Agree	
D. You have the feeling of doing useful work	5. Strongly agree	

dinavia (46%) and other European countries (44%). In particular, Scandinavian men perceive their jobs as being well paid (53%). In all country groups more men than women perceive themselves as well paid.

The country comparisons presented in Figure 1 were made by using basic cross tabulations, in which other variables that may possibly influence the responses have not been controlled for. Nevertheless, it is important to see whether observed country differences remain after controlling for several background variables or if they are in fact explained by demographic and structural factors. Logistic regression provides a tool for this purpose.

Table 2 presents the results of the logistic regression conducted separately for each subjective measure of job quality. The results show rather detailed information on which structural variables are connected to different aspects of job quality. However, our main focus is not on explaining factors related to high autonomy or high perceived insecurity. Attention is drawn to country dummies which show that the overall picture of job quality is very similar in comparison to previous results presented in Figure 1. The analyses were conducted in two steps. First step included only country group. In second step we added as control variables several background factors. Because country differences remained

Figure 1. Dimensions of job quality in country clusters.



unchanged after controlling for background variables, only the results of last step are reported in Table 2.

The first and third columns of Table 2 confirm that there are no significant differences between Finland and Scandinavia in the likelihood of having a job with high skill requirements or high effort after the effects of the control variables are adjusted. The second column verifies the earlier result that working in Scandinavia increases the possibilities of having a job with higher autonomy than in Finland and other EU25 countries. Concerning perceived job insecurity, there are no differences between country clusters before or after controls. The column displaying the odds ratios for groups of respondents answering that they think their 'health is at risk' because of work validates our earlier claim that Finns are less worried about their health than their counterparts in other European and Scandinavian countries. It is notable that after controlling for structural variables, the difference on health worries between employees in Finland and other European countries becomes statistically insignificant and Scandinavians take a striking lead. The last column reaffirms that Finnish employees are the most unsatisfied with their pay compared to employees in other country groups. To summarize, according to the conducted logistic regression analysis, country still appears to be a significant predictor of job quality after the effects of various background variables were taken into account. Nevertheless, the model represented here includes only structural variables as controls and it is notable that these factors together have very low explanatory power (only 3 to 5 percent of variation in aspects of job quality). The high  $R^2$  of skill requirements (0.168) is largely explained by occupation as employees in higher positions in organizations have more complex job content in comparison to employees in elementary occupations.

### *The relationships between skills, autonomy, effort, job security and pay to job satisfaction*

Next we analyze what kind of affect different facets of job quality have on job satisfaction. The first problem is how to measure job satisfaction properly. Indicators of job satisfaction used in previous research measure often measure only one aspect of overall job satisfaction. This is the case in the EWCS where there is only one explicit question concerning satisfaction with working conditions, which is not the most useful indicator for measuring overall satisfaction since it addresses the external conditions of work. Intrinsic rewards, such as having an interesting job with opportunities to learn and use skills and being recognized for doing a good job, have been pointed out to be more significant factors affecting job satisfaction (Kalleberg & Vaisey, 2005). Secondly, single item measures are not very reliable due to the problems of internal consistency valuation and the fact that variance cannot be averaged out (Sousa-Poza & Sousa-Poza, 2000).

Our strategy is to construct a composite index from variables measuring different dimensions of job satisfaction. This way the job satisfaction indicator becomes more reliable and extensive and we are able to study more broadly how various factors affect job satisfaction. The index of job satisfaction included five questions. Questions concerned workers' satisfaction with working conditions, the opportunity to do work they are best at, a job that provides the feeling of doing a job well, the ability to apply one's own ideas in work and the feeling of doing useful work. Because variables were on a different scale they had to be standardized before constructing the index. The internal consistency of scale was good (Cronbach's alpha = 0.76).

The analyses were conducted separately for each country group and two equations were estimated, one with subjective and the other with objective measures of the dimensions of

Table 2  
*Logistic regression analyses on dimensions of job quality (odd's ratios).*

	<i>High skill requirements</i>	<i>High autonomy</i>	<i>High effort</i>	<i>High insecurity</i>	<i>Health at risk</i>	<i>Well paid</i>
<i>Age</i>	1	1.01*	0.99*	0.98*	1	1
<i>Gender</i>						
Female	0.64*	1	0.90*	1.08	0.64*	0.76*
Male (ref.)	1	1	1	1	1	1
<i>Occupation</i>						
Managers	10.47*	3.39*	1.45*	0.37*	0.69*	3.15*
Professionals	7.57*	2.25*	0.94	0.59*	0.73*	2.10*
Technicians	6.02*	1.81*	1.08	0.61*	0.65*	1.86*
Clerks/Workers	2.33*	0.93	1.28*	0.85*	1.17*	1.30*
Elementary (ref.)	1	1	1	1	1	1
<i>Industry</i>						
Services	0.91*	1.38*	0.74*	0.84*	0.62*	1
Agriculture	0.97	1.91*	0.69*	1.05	0.80*	0.83
Industry (ref.)	1	1	1	1	1	1
<i>Sector</i>						
Public	1.38*	0.91*	0.75*	0.65*	1.54*	0.77*
Other	1.90*	1.04	1.11	0.84*	1.26*	0.98
Private (ref.)	1	1	1	1	1	1
<i>Country group</i>						
Scandinavia	1.04	1.42*	0.94	1.01	1.77*	1.78*
Other EU	0.53*	0.77*	0.58*	0.99	1.15	1.71*
Finland (ref.)	1	1	1	1	1	1
<i>N</i>	19873	19873	19798	18903	19413	19721
<i>Nagelkerke R2</i>	0.168	0.083	0.037	0.036	0.052	0.039
<i>Constant/Sig.</i>	0.520*	0.961*	0.530*	0.718*	-0.683*	-1.14*

\* = coefficient significant at 95 % level

job quality. Using both subjective and objective measures we are able to specify more clearly the relationship between job quality and job satisfaction. Original i.e. continuous versions of measures of job quality are used in the analyses. Some of the dimensions of job quality had clearly both subjective and objective measures, income and perceiving oneself well paid or employment contract and perception of job security correspond to objective and subjective measures respectively. In both of these dimensions objective and subjective measures correlated only modestly. This indicates that objective conditions and perceptions of them are separate phenomenon and should be treated as such in the analyses. The inspection of standardized residuals and normal probability plots reveal that for all models the assumptions of normality, linearity and homoscedasticity are met.

Firstly, analyses (Table 3) indicate that subjective measures of job quality have clearly a stronger effect on job satisfaction than objective measures. Secondly, subjective measures explain more variance in job satisfaction in other EU-countries in comparison to Scandinavia and Finland. In all groups cognitive demands, autonomy, subjective rating of pay and perception of job insecurity explain job satisfaction. Autonomy had the strongest effect in Finland and Scandi-

navia, but in the other EU25-states the subjective rating of pay was the most important factor explaining job satisfaction. The more autonomy one has and the better one perceives his or her pay the more satisfied with a job one is. Also, a job with cognitive demands and the perception of a job as secure increase satisfaction with a worker's current job. The effect of objective measures varies more between countries. In all groups country-level income deciles had the strongest effect on job satisfaction. In Scandinavia income was the only objective measure that had a significant effect. The more income the more satisfied people are with their job. However, income clearly had a smaller effect than the subjective rating of one's pay in Finland and other EU25 states. Also work hours and participation in training had an effect on job satisfaction, but only in Finland and the other EU25-states. In Finland length of work hours had positive effect to job satisfaction. Controversially, in other EU25, longer hours seem to be connected to lower job satisfaction.

## Discussion

The principal aim of our exploratory study was to compare the perceived job quality of Finnish employees with the perceptions of job quality held by their Scandinavian and Euro-

Table 3  
*OLS regression analysis on job satisfaction (standardized coefficients).*

		<i>Finland</i>	<i>Scandinavia</i>	<i>Other EU</i>
<i>Objective</i>	Health risks	-0.06	<-0.01	-0.03*
	Work hours	0.10*	-0.01	-0.04*
	Participation in training	0.09*	0.03	0.09*
	Income (deciles)	0.13*	0.15*	0.08*
	Indefinite employment contract	-0.05	-0.04	0.04*
	N	759	810	11257
	R <sup>2</sup>	0.08	0.07	0.08
<i>Subjective</i>	Constant	-0.71	-0.25	-0.38
	Work intensity	<-0.01	-0.02	-0.09*
	Job content	0.17*	0.13*	0.21*
	Autonomy	0.27*	0.23*	0.20*
	Subjective rating of pay	0.19*	0.16*	0.23*
	Perception of job insecurity	-0.14*	-0.15*	-0.14*
	N	896	1012	17741
	R <sup>2</sup>	0.22	0.18	0.28
<i>Constant</i>	-1.72	-1.15	-1.42	

Controlling for gender, age, occupation, having a spouse and having children

\* = coefficient significant at 95 % level

pean counterparts. The views provided by analyses based on the fourth European Working Conditions survey data support the earlier claims of (Gallie, 2003) on Scandinavian countries leading position in job quality. Gallie employed the Employment in Europe data collected in 1996 in which Denmark and Sweden stand out as being distinctive in job quality, whereas Finland seemed to lack behind on some indicators. The results presented in chapter 3 and 4 support the uniqueness of Scandinavian countries. In terms of positioning of Finland as 'borderline' country of Scandinavia, measures employed in the study at hand, give a slightly divergent picture. According to Gallie, Finland had a lower quality of work task, which is a measure that could be compared to indicators of skill and autonomy used in the present study. Our results show that Finnish employees report very similar levels of skill demands to Scandinavians but do have less discretion over their tasks than Scandinavians (even after controls). Gallie explained the higher discretion and task quality in Nordic countries by policy orientations taken towards quality of work-life issues in these countries. For Gustavsen (2007) this explanation was too general and he highlighted the specific work organization development initiatives that have been followed at the workplace level which have differed and thus caused some variation between societies and also between workplaces.

Questions measuring job insecurity were very different in nature in these two surveys; Gallie measured perceived worker protection in the case of dismissals and EWCS measured subjective perception on the future of a worker's job. Gallie's measure highlights only one aspect of employment security; how binding are the contracts for employers and how much strong negotiating power do trade unions have? The results point out a rather strong sense of security and protection in Sweden and Finland. The measure used in EWCS

could encapsulate broader aspects of insecurity such as the effects of economic downturns, employees' personal capabilities to keep their job, as well as employer restrictions on dismissing their employees. The results show that after controlling for structural factors there is no significant difference in the level of perceived insecurity between country groups.

Gallie (2003) did not include measures of work effort or health risks in his analyses. According to our study, employees in Finland and Scandinavia experience, to some extent, a greater pace in their work compared to other European countries. Furthermore, Scandinavians appear to be distinctively worried over their health because of work. It is important to include indicators of health risks and time pressure in the analysis since all kinds of health and safety initiatives have been essential in the early stages of job quality improvement programmes. Moreover, the intensification of work and its implications for the future of work-life are rather central aspects of current job quality discussions. These two trends, intensification of work and perceived health risks might also be interconnected. Increasing pace of work has been seen as risk factor for both physical and psychological working conditions since it eradicates the possibilities to choose the best tool, document or software, spending time to obtain useful information or to build a cooperative network, anticipating forthcoming tasks or to take breaks (Boisard et al., 2005; Burchell et al., 2009).

To summarize, our results speak in favour of societal effects because being employed in a certain country does have implications for job quality. Nevertheless, divergent results have been drawn from the same data. Smith et al. (2008) have conducted comparative research on job quality using data from the 2005 *European Working Conditions* survey. Their conclusion is that national or country-specific mod-

els do not have such a focal influence on an individual's job quality. Respectively, gender, occupational status along with job characteristics like working time and economic sector are more significant factors. Measures of job quality, country clustering and dependent variables explain the dimensions of job quality used in Smiths' study group and were composed differently from the models applied in this study.

The second focus of this research was on general job quality indicators, on workers' job satisfaction. Multivariate analysis revealed that subjective measures of job quality have clearly stronger effects on job satisfaction than objective measures. The results support the view presented by Sousa-Poza & Sousa-Poza (2000) on job satisfaction determined by subjective self-perceptions. In particular, a high level of worker discretion, the perception of one's pay as fair and the cognitive demands of work increase job satisfaction. These findings are mainly in line with Green's (2006; see also Green & Tsitsianis, 2005) notion that effort, task discretion and qualification match are the most important factors for explaining job satisfaction. However, some results contradict those of Green's (2006). In our analyses both subjective and objective measures of income are important factors affecting job satisfaction. In addition, work effort measured subjectively (intensity) or objectively (work hours) have only minor effects or no effect at all on job satisfaction.

Whether or not country has influence on the job satisfaction is a debated issue. In our analyses country group appeared to affect the determinants of job satisfaction, even after controlling for background variables. The most important factor in explaining job satisfaction in Finland and Scandinavia was worker discretion, but in the other EU states it was the perception of pay. These results follow the pattern outlined by Wallace et al. (2007): Extrinsic rewards, such as pay and secure job had a greater impact on job satisfaction in less prosperous Southern and Eastern European countries. Instead, in the wealthier EU countries the intrinsic aspects of work (good career prospects, interesting work) were more significant predictors of job satisfaction. In their later research, Pichler & Wallace (2009) question the impact of society to job satisfaction and explain country-level variance not only in terms of individual-level factors but also institutional factors, such as wage levels, extent of unionization, unemployment rates and inequality, are taken into account.

It has to be noted that the country clustering used in this analysis is very rough and does not offer the possibility to shed more light on the internal differences within Europe. Nevertheless, there are other comparative studies that have been conducted and which follow a more delicate country clustering. A recent study by Peña-Casas & Pochet (2009) pointed out interesting results: although Scandinavia is known for high levels of discretion, training and use of skills, there has been some movement downwards (towards the European average) and countries like the Netherlands and Great Britain have moved closer to the Scandinavian level in terms of job quality. Maintaining distinct quality of work-life in Northern European countries is not self-evident. National institutional structures, such as education system and collective labour agreements that have supported the work

life developments, are themselves subjected to change pressures. For example in Sweden researchers have pointed out that weakening welfare state is no longer able to produce positive effects to work life (e.g. Huzzard, 2003). These trends point out the need for continuous attention to work-life development and research.

## References

- Barnett, R. C., & Hyde, J. S. (2001). Women, men, work, and family. *American Psychologist*, 56(10), 781–796.
- Boisard, P., Cartron, D., Valeyre, A., Gollac, M., & Besancon, J. B. (2005). *Time and Work: Work Intensity* (European Foundation for the Improvement of Living and Working Conditions). Luxembourg: Office for Official Publications of the European Communities.
- Burchell, B., Cartron, D., Csizmadia, P., Delcampe, S., Gollac, M., Illésy, M., et al. (2009). *Working Conditions in the European Union: Working Time and Work Intensity* (European Foundation for the Improvement of Living and Working Conditions). Luxembourg: Office for Official Publications of the European Communities.
- Dahl, S., Nesheim, T., & Olsen, K. M. (2009). *Quality of Work: Concept and Measurement* (Working Papers on the Reconciliation of Work and Welfare in Europe No. 05/2009). Edinburgh: RECOWOE Publication, Dissemination and Dialogue Centre.
- European Commission. (2008). *Employment in Europe 2008*. Luxembourg: EC.
- Felstead, A., Gallie, D., Green, F., & Zhou, Y. (2007). Skills at Work, 1986 to 2006. *Universities of Oxford and Cardiff*.
- Gallie, D. (2003). The quality of working life: Is Scandinavia different? *European Sociological Review*, 19(1), 61.
- Gallie, D. (2005). Work pressure in Europe 1996–2001: Trends and determinants. *British Journal of Industrial Relations*, 43(3), 351–375.
- Gallie, D. (2007a). Production regimes and the quality of employment in Europe. *Annual Review of Sociology*, 33, 85–104.
- Gallie, D. (2007b). Production regimes, employment regimes and the quality of work. In D. Gallie (Ed.), *Employment regimes and the quality of work* (pp. 1–33). New York: Oxford University Press.
- Gallie, D. (2007c). Welfare Regimes, Employment Systems and Job Preference Orientations. *European Sociological Review*, 23(3), 279–293.
- Gershuny, J. (2005). Busyness as the badge of honor for the new superordinate working class. *Social Research: An International Quarterly*, 72(2), 287–314.
- Goetschy, J. (2002). A Transition Year for Employment in Europe: EU Governance and National Diversity under Scrutiny. *Industrial Relations Journal*, 33(5), 405–423.
- Green, F. (2006). *Demanding work: The paradox of job quality in the affluent economy*. Princeton: Princeton University Press.

- Green, F., Dickerson, A., Carruth, A., & Campbell, D. (2001). *An Analysis of Subjective Views of Job Insecurity* (Discussion paper No. 01/08). Canterbury: University of Kent.
- Green, F., & Tsitsianis, N. (2005). An investigation of national trends in job satisfaction in Britain and Germany. *British Journal of Industrial Relations*, 43(3), 401–429.
- Gustavsen, B. (2007). Work Organization and the Scandinavian Model. *Economic and Industrial Democracy*, 28, 650–673.
- Hall, P. A., & Soskice, D. W. (2001). An Introduction to Varieties of Capitalism. In *Varieties of capitalism: The institutional foundations of comparative advantage* (pp. 1–68). Oxford: Oxford University Press.
- Huzzard, T. (2003). *The Convergence of the Quality of Working Life and Competitiveness: A Current Swedish Literature Review* (Work Life in Transition No. 2003:9). Stockholm: National Institute for Working Life.
- Julkunen, R. (2008). *Uuden työn paradoksit. Keskusteluja 2000-luvun työprosess(e)ista*. Tampere: Vastapaino.
- Kalleberg, A., & Vaisey, S. (2005). Pathways to a Good Job: Perceived Work Quality of the Machinists in North America. *British Journal of Industrial Relations*, 43(3), 431–454.
- Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic books.
- Lehto, A. M. (2009). Työelämän laadun kolme vuosikymmentä. In A. Pärnänen & K. M. Okkonen (Eds.), *Työelämän suurten muutosten vuosikymmenet* (pp. 121–145). Helsinki: Statistics Finland.
- Lehto, A. M., & Sutela, H. (2005). *Threats and Opportunities: Findings of Finnish Quality of Work life Surveys 1977–2003*. Helsinki: Statistics Finland.
- Lorenz, E., & Valeyre, A. (2005). Organisational Innovation, Human Resource Management and Labour Market Structure: A Comparison of the EU-15. *Journal of Industrial Relations*, 47(4), 434–442.
- Lowe, G. (2003). The case for investing in high quality work. *European Commission's Mid-Term Review of the Social Policy Agenda: Achievements and Perspectives, 19-20 March*.
- Parent-Thirion, A., & F. M., Hurley, J., & Vermeylen, G. (2007). *Fourth European Working Conditions Survey* (European Foundation for the Improvement of Living and Working Conditions). Luxembourg: Office for Official Publications of the European Communities.
- Paugam, S., & Zhou, Y. (2007). Job insecurity. In D. Gallie (Ed.), *Employment regimes and the quality of work* (pp. 179–204). New York: Oxford University Press.
- Peña-Casas, R., & Pochet, P. (2009). *Convergence and Divergence of European Working Conditions in Europe: 1990-2005* (European Foundation for the Improvement of Living and Working Conditions). Luxembourg: Office for Official Publications of the European Communities.
- Pichler, F., & Wallace, C. (2009). What are the Reasons for Differences in Job Satisfaction across Europe? Individual, Compositional and Institutional Explanations. *European Sociological Review*, 25(5), 535–549.
- Sirgy, M. J., Efraty, D., Siegel, P., & Lee, D. J. (2001). A new measure of quality of work life (QWL) based on need satisfaction and spillover theories. *Social Indicators Research*, 55(3), 241–302.
- Smith, M., Burchell, B., Fagan, C., & O'Brien, C. (2008). Job quality in Europe. *Industrial Relations Journal*, 39(6), 586–603.
- Sousa-Poza, A., & Sousa-Poza, A. A. (2000). Well-being at work: a cross-national analysis of the levels and determinants of job satisfaction. *Journal of Socio-Economics*, 29(6), 517–538.
- Tåhlin, M. (2007). Skills and Wages in European Labour Markets: Structure and Change. In D. Gallie (Ed.), *Employment regimes and the quality of work* (pp. 35–76). New York: Oxford University Press.
- Valeyre, A., Lorenz, E., Cartron, D., Csizmadia, P., Gollac, M., Il-léssy, M., et al. (2009). *Working Conditions in the European Union; Work Organisation* (European Foundation for the Improvement of Living and Working Conditions). Luxembourg: Office for Official Publications of the European Communities.
- Wallace, C., Pichler, F., & Hayes, B. (2007). *First European Quality of Life Survey: Quality of Work and Life Satisfaction*. Dublin: European Foundation for the Improvement of Living and Working Conditions.