JYVÄSKYLÄ STUDIES IN EDUCATION, PSYCHOLOGY AND SOCIAL RESEARCH
586

Armi Mustosmäki

How Bright are the Nordic Lights?

Job Quality Trends in Nordic Countries in a Comparative Perspective

JYVÄSKYLÄN YLIOPISTO

JYVÄSKYLÄ STUDIES IN EDUCATION, PSYCHOLOGY AND SOCIAL RESEARCH 586

Armi Mustosmäki

How Bright are the Nordic Lights?

Job Quality Trends in Nordic Countries in a Comparative Perspective

Esitetään Jyväskylän yliopiston humanistis-yhteiskuntatieteellisen tiedekunnan suostumuksella
julkisesti tarkastettavaksi Historica-rakennuksen salissa H320
kesäkuun 10. päivänä 2017 kello 12.

Academic dissertation to be publicly discussed, by permission of
the Faculty of Humanities and Social Sciences of the University of Jyväskylä,
in building Historica, hall H320, on June 10, 2017 at 12 o'clock noon.

UNIVERSITY OF JYVÄSKYLÄ

JYVÄSKYLÄ 2017

How Bright are the Nordic Lights?

Job Quality Trends in Nordic Countries in a Comparative Perspective

JYVÄSKYLÄ STUDIES IN EDUCATION, PSYCHOLOGY AND SOCIAL RESEARCH 586

Armi Mustosmäki

How Bright are the Nordic Lights?

Job Quality Trends in Nordic Countries in a Comparative Perspective

UNIVERSITY OF JYVÄSKYLÄ

JYVÄSKYLÄ 2017

Editors
Olli-Pekka Moisio
Department of Social Sciences and Philosophy, University of Jyväskylä
Pekka Olsbo, Sini Tuikka
Publishing Unit, University Library of Jyväskylä

Cover: Päivi Hintsanen, *Tarinoilla tasapainoilija II - Balancing on Stories, II*. 2015, pigment ink print.

Permanent link to this publication: http://urn.fi/URN:ISBN:978-951-39-7103-8

URN:ISBN:978-951-39-7103-8
ISBN 978-951-39-7103-8 (PDF)

ISBN 978-951-39-7102-1 (nid.)
ISSN 0075-4625

Jyväskylä University Printing House, Jyväskylä 2017

ABSTRACT

Mustosmäki, Armi
How bright are the Nordic lights? Job quality trends in Nordic countries in a comparative perspective
Jyväskylä: University of Jyväskylä, 2017, 123 p.
(Jyväskylä Studies in Education, Psychology and Social Research
ISSN 0075-4625; 586)
ISBN 978-951-39-7102-1 (nid.)
ISBN 978-951-39-7103-8 (PDF)

Nordic countries stand out from the rest of the Europe in terms of job quality. Comparative research literature sought to explain the distinctiveness of Nordic countries with diverse sets of institutional frameworks. However, global competition, technological revolution and deregulation are common developments throughout the industrial world – processes which are seen to erode the meaning of institutions and nation states as protective mechanisms. This dissertation discusses the question on the existence and persistence of the Nordic working life model through the concept of job quality, which are investigated using surveys on working conditions. The study draws from both universal and institutional theories to examine changes in work life comparatively. The results lend support to a persistence of high quality of work life in Nordic countries: the Nordic countries stood out as the only group where employees' possibilities to influence their work and use and develop skills were high and continued to increase. Furthermore, as institutional theory expects, the risk of class polarization was found to be low as inequalities in job quality have decreased between manual and professional employees. The findings partly challenge, partly support the claims concerning the gender equality paradox in work life in Nordic countries: gender gap in job quality was decreasing in all regimes, and had disappeared between upper white-collar women and men in Finland. However, gender gap in job quality remained the widest in Nordic countries, and was found to be especially persistent among lower white collar female and male employees in Finland. Several seepages of institutions were pointed out: intensification of work has increased significantly, especially for women. Perceived job insecurity has increased and become common experience regardless of class. Low class inequality was in fact partly due to the degradation of job quality of male professionals and managers. In addition, the study found that benchmarked managerial practices, interpreted as institutional avoidance, demand attention to sectoral and managerial logics in rapidly emerging service industries. These practices challenge the functioning of institutions as protecting mechanisms. Consequently, the study concludes that the capability of institutions to resist the pressures for change and insulate the consequent deterioration of job quality becomes debatable.

Keywords: job quality, comparative research, Nordic countries, work life change, institutional theories, gender equality, class inequality

Author's address Armi Mustosmäki
Department of Social Sciences and Philosophy
P.O. Box 35
FI-40014 University of Jyväskylä
armi.mustosmaki@jyu.fi

Supervisors Timo Anttila
Department of social sciences and philosophy
University of Jyväskylä

Jouko Nätti
Faculty of Social Sciences
University of Tampere

Reviewers Tuomo Alasoini
TEKES

Sonja Drobnić
BIGGS, University of Bremen

Opponent Tuomo Alasoini
TEKES

ESIPUHE

Aivan ensimmäiseksi kiitän niitä, joiden olkapäillä nyt seison. Ohjaajilleni Timo Anttilalle ja Jouko Nätille kuuluu isoin kiitos: siitä että otitte riskin ja palkkasitte minut Työsuojelurahaston projektiin ”Työelämän laatu ja laadun arviointi” tarjoten työmahdollisuuden ”gradua vaille tuplamaisterille”. Sellaiseksi olisin nimittäin saattanut jäädäkin ilman tätä mahdollisuutta – ja mahdollisesti seilaisin edelleen Helsingin ja Tukholman välillä tarjoilijana. Kiitos kuuluu myös Tomi Oinaalle. Alusta saakka olen tuntenut olevani osa timanttista työryhmää. Olette auliisti jakaneet kokemuksianne ja oppeja – kaikesta siitäkin mistä en olisi osannut edes kysyä. Teidän ansiostanne olen myös saanut tehdä tätä suureksi osaksi palkkatyönä ja ilman stressiä rahoituksesta. Siksi tämä ei ole yksin minun saavutus. Ilman teitä en olisi tässä.

Kiitän myös esitarkastajiani Tuomo Alasoinia ja Sonja Drobnićia käsikirjoituksen yksityiskohtaisesta kommentoinnista, jotka auttoivat viimeistelyvaiheessa. Tuomo Alasoini kiitän myös vastaväittäjäksi lupautumisesta, varsin nopealla aikataululla.

Tutkijakoulu LabourNet – TyöVerkko on ollut tärkeä monin eri tavoin. Seminaarit, kurssit ja rahoitus ovat tarjonneet verkostoitumis- ja kasvualustan monelle nuorelle tutkijalle, mukaan lukien itseni. Kiitos Pertti Koistiselle toiminnan organisoinnista.

Mia Tammelinia kiitän yhteistyöstä ja (epävirallisesta) mentoroinnista: siitä että ehdotit toimitussihteerin pestiä Työelämän tutkimus – lehdessä ja kaikesta opista ja jakamisesta päätoimituskautesi aikana. Opin mittaamattoman paljon toimittamisesta, kirjoittamisesta ja yhteistyöstä.

Suomen Akatemian SOWK-hankkeessa oli ilo työskennellä ja tutustua Tampereen yliopiston tutkijoihin. Kiitos Harri Melin, Pasi Pyöriä, Satu Ojala ja Tiina Saari. Erityisesti Tiinalle kiitos ”etätuesta”, sinussa on terapeutin ainesta!

Yhteiskuntatieteiden ja filosofian laitos on ollut – ja on – mitä mainion paikka työskennellä! Kiitos lounaista, seminaareista ja hauskoista illoista!

Erityiskiitos työhuoneen ja monien, pinnallisten ja syvällisten, oivaltavien ja analyyttisten, ajatuksien jakamisesta Tiina Sihdolle. Olet auttanut oivaltamaan monta asiaa itsestäni ja elämästä! Diginatiivina olet myös opettanut niksin jos toisenkin, ja kärsivällisesti niitä toistanut. Olet sosiaalinen ankkurini ja (työ)päivieni valo!

Kiitän myös ystäviäni: Katariina, Elina, Tanja, Heini, Anu, Pama, Karoliina ja monet muut. Arvostan sitä että aina voi jatkaa siitä mihin viimeksi jäimme.

Äitini antoi työteliään, lukevan ja uteliaan ihmisen mallin. Kiitän myös äitini lisäksi muita suvun voimanaisia, tätiäni ja mummoani uskosta koulutuksen kannattavuuteen ja siitä, että annoitte aina ymmärtää että pystyn mihin vain.

Puolisolleni kiitos siitä, että projektin alkuvaiheessa ankkuroit muuten niin levottomia jalkojani Jyväskylään. Kiitos kärsivällisyydestä ja rinnallakulkemisesta koko projektin ajan. Emil ja Helvi, on virkistävää että elämässä on ihmisiä, jotka eivät juuri välitä mitä teen työkseni. Irrotatte minut työstä – ja välillä myös itsestäni. Toivon, että tekin löydätte, sattumalta tai määrätietoisesti, unelmia, joita kohti kulkea, ja että voin teitä pyrkimyksissänne tukea.

Toukokuun lumisateessa
Jyväskylässä 11.5.2017,
Armi Mustosmäki

FIGURE

TABLE

CONTENTS

LIST OF ORIGINAL ARTICLES

I Hartikainen, A., Anttila, T., Oinas, T. and Nätti, J. (2010) Is Finland Different? Quality of Work among Finnish and European employees. Research on Finnish Society 3, 29-41.

II Oinas, T., Anttila, T., Mustosmäki, A. & Nätti, J. (2012) The Nordic Difference: Job quality in Europe 1995-2010. Nordic Journal of Working Life Studies 2(4), 135–52.

III Mustosmäki, A., Anttila, T., Oinas, T. and Nätti, J. (2011) Job Quality Trends in Europe –Implications for Work-Life Balance. In: Drobnič, S. & Guillèn, A. (Eds.) Work-Life Balance in Europe. The Role of Job Quality. Palgrave Macmillan

IV Mustosmäki, A., Oinas, T., Anttila, T. & Nätti, J. (2016) Abating inequalities? Job quality at the intersection of occupational position and gender in Finland 1977-2013. Acta Sociologica, Published online ahead of print.

V Mustosmäki, A., Anttila, T. & Oinas, T (2013) Engaged or Not? A Comparative Study on Factors Inducing Work Engagement in Call Center and Service Sector Work. Nordic Journal of Working Life Studies 3(1), 49-67.

1 INTRODUCTION

1.1 The question on existence and persistence of the Nordic working life model

> *'Quality of working life is characterized as an area of emerging interest and significant impact on advanced societies during the next twenty-five years. The nature and size of the crisis is to be significant – including the related but diverse element of alienation, growing disillusion in the service sector, perceived scarcity of jobs as well as problems of absorbing rapid technical and social changes, on the one hand, and including and incorporating the disenfranchised worker, on the other.' (Cherns & Davis, 1975)*

The challenges facing our societies and working life described over 40 years ago could be an extract of contemporary discussions. Europe is in the middle of an unprecedented period of prolonged economic crisis and increasing unemployment. The pressures of globalization and rapid technological change are seen to destroy jobs, especially the middle class manufacturing and clerical jobs that traditionally, offered stability and decent living. Meanwhile, reliance in the service sector's capability in creating new high quality jobs and sustaining employment levels has diluted. The consequent polarization and increasing inequality are seen to profoundly transform social and economic lives.

When seeking solutions to these problems the discussions do not concern developing quality of work life. Instead, in current political and public debates, Europe seems to be turning gaze towards American labour markets. Low unemployment rates in the United States are seen as a function of its deregulated institutions, which allow high earnings inequality and considerable employment growth. It has been debated whether European economies stifled employment growth is a result of their rigid employment institutional frameworks. Consequently, there are increasing pressures to solve the unemployment crisis with concerted efforts to deregulate the EU's employment laws and unions, to open up the labor market to offer outsiders more

opportunities for employment and thus reduce demographic inequalities. (See e.g. Barbier 2012; Bothfeld & Leschke 2012; Dieckhoff & al. 2015.)

The current political atmosphere is very different compared to the time of starting this PhD project. In 2009 joining the research project "Quality of work life and its measurement in Finland" the issue on improving quality of work life was at the core of both political and academic interest. The quality of jobs had become the explicit objective of the European Commission in the Lisbon meeting in 2001, much like Cherns & Davis (1975) predicted. "*We do not need only more jobs, but better jobs*", was the "motto" of the political agenda for both European Union (EC2001) and later that of the OECD employment strategy (OECD 2003). Job quality was also seen as important for economic development, employee well-being and social inclusion.

Also, in Finland, improving quality of work life was a major policy issue, and in 2011 the government and the Ministry of Employment chose it as one of three main policy goals. A strategy was prepared together with labor market partners, and the goal was set to develop Finnish working life to be the best in Europe by 2020. Improving quality of work life was seen as a key issue in relation to improving productivity and competitive advantage, achieving higher employment rate, longer working careers and life-long learning, as well as general well-being of the employees and their families (e.g. Lowe 2003; National Working Life Development Programme 2020).

Nordic countries, Finland among them, have traditionally been forerunners in developing work life. Norway and Sweden were among the first ones to implement specific development programs aimed at enriching job contents and creating autonomous teams (Cherns & Davis 1975, Gustavsen 2007). Also Finland has a history of successful development programs (e.g. Arnkil 2004; Alasoini 2016a). Accordingly, in European comparisons, Nordic countries stand out as distinctive in terms of quality of work life. Employees report high autonomy and good possibilities to use and develop skills, even among the lower skilled employees (Edlund & Grönlund 2010, Esser & Olsen 2012, Lopes et al. 2015) as well as relatively low insecurity (e.g. Erlinghagen 2008).

The high quality of work life in Nordic countries[1] is an interesting but also an ambiguous phenomenon. The reason for the success is seen to lie in the institutional framework that forms a distinctive setting in and around the labor market. In this study, *Nordic working life regime* is defined through theories on Varieties of Capitalism, especially those of production regimes (Hall & Soskice 2001) and employment regimes (Gallie 2007a). More specifically, Nordic

---

[1] In this compilation Nordic countries include Finland, Denmark, Sweden and Norway while Iceland is excluded due to lack of data. In individual chapters and articles there is variation whether "Nordic" refers to just Finland or three countries Denmark, Sweden and Finland and whether also Norway is included. The choice to refer to Nordic regime in a rather straightforward way is pragmatic and conscious to raise the level of discussion, but also seen justified in light of research presented in chapter 3. For more detailed discussion on benefits and risks of regime categorisations, see chapter 4.2.

countries are seen to epitomise *inclusive employment regime* where labor market institutions regulate work life creating high quality of work life: labor legislation, trade unions, collective agreements and inclusive educational and training systems are seen to improve employees' possibilities to develop skills, participate to decisions concerning their own jobs as well as to influence organizational decision making and contribute to high job security of the employees (Bosch & al. 2007, Gallie 2003, 2007a). In addition, together with labor market institutions, the broader welfare state framework has been seen to reduce the inequalities between various groups of employees and offer women more equal opportunities to participate in work life (Esping-Andersen 1990, 1999, Gallie 2007a, Lewis 1992).

However, the persistence of the Nordic working life regime supporting the high quality of jobs has been called into question. Global competition, technological revolution and deregulation are common developments throughout the industrial world – processes which are seen to erode the meaning of institutions and nation state as protective mechanisms. The national institutional structures that are seen to create and support Nordic exceptionalism, such as the education systems (including vocational education and training) and collective labor agreements, have been subjected to strong pressures for change (Bosch et al. 2007). For example, in Sweden, researchers have pointed out that a weakening welfare state is no longer able to produce positive effects to work life (e.g. Huzzard 2003). Scholars have envisaged and discussed widely how the effect the national institutions is at risk of diminishing due not only to globalization and technological change but also deliberately, through deregulation in order to harmonize legislation across the EU (e.g. Vos 2006, Lillie & al. 2014).

1.2 Research aims and questions

The aim of this doctoral dissertation is to discuss the existence and persistence of the Nordic working life regime. The title *How bright are the Nordic lights* refers to the described distinct set of institutional framework, labelled as Nordic working life model producing and sustaining high quality of work life across wide range of workers. However, much of the literature on change in work life and convergence implicitly predict similar outcomes across the industrialized world. The meaning of institutions in filtering the pressures for change and producing diverging outcomes is often neglected. This study draws from both universal and institutional theories in understanding the Nordic exceptionalism as well as the threats the model and the employees are facing. I approach the above described convergence-divergence nexus relying to the concept of job quality, measured and studied through working conditions surveys.

The dissertation consists out of five published articles and this compilation. The broad aim given to the compilation of an article based dissertation is to highlight the main findings of the individual articles and discuss the empirical

results in a wider theoretical framework and describe their contribution to theoretical, empirical and practical knowledge. Beyond these more technical, perhaps self-evident aims set for this compilation, it is also possible to approach and read it as a metanarrative on the learning process: how at various stages of this research process, article by article, I added an additional layer to the main research problem on the existence and persistence of the Nordic working life model, approached through the concept of job quality.

The conceptual analysis and literature review marked the beginning and the completion of this research project (chapter 2), as the field has developed rapidly and (comparative) research on job quality has proliferated during the past decade. Hence the second section of the compilation provides a more comprehensible and analytical outlook and state-of-art account to the job quality concept than has been possible within the separate empirical articles. The chapter develops the definition of job quality through its history, politics and academic usages.

Building the theoretical framework (chapter 4) has walked hand in hand with the individual articles. Theoretical framework also further defines Nordic working life regime and how institutional framework is expected to affect job quality. The chapter also further defines the concept of Nordic working life regime. The empirical enquiry started from cross-country comparisons in job quality explained by country level institutional differences, asking *Are Nordic countries different?* (article I). It continued towards studying job quality trends between employment regimes, asking *Have Nordic countries retained their advantageous positions in terms of job quality in the face of pressures for change?* (article II). Chapter 5.1 concentrates on these questions.

In various seminars, I was posed with the question on how much variation there is behind the national averages. I started to question if institutional framework in Nordic countries is expected to promote improved quality of jobs, is their strength equally distributed across employee groups and sectors? Much of the literature on work life change anticipates polarization and growing inequality in work life. However, earlier research results supporting polarization between higher and lower skilled employees were based on data from liberal countries, such as the United Kingdom and the United States. Whether increasing class inequality in job quality is confined to the liberal countries has been a question left open. Consequently, I was drawn to study the question *"is job quality polarising?"* using data from Finland, as a representation of the Nordic working life regime. This question is addressed in chapter 5.2.

The process of reviewing what institutional theory and earlier research postulates on gender gap in Nordic work life challenged the popular views on Nordic countries as the best haven for (working) women. Gender inequality in work life, especially those of wage inequality and glass-cielings, were to my mind, universal troubles, not specifically Nordic –in fact I assumed gender gap in work life to be smaller in Nordic according to all possible factors. However, the ideas put forward in production regime theories, in its gendered extension and 'welfare state paradox' more specifically, guided me to ask a further

question: *Is gender inequality in job quality higher in Nordic countries compared to other employment regimes*? (article III). Originally the article employed to answer the question was written to contribute to a book on interlinkages on how job quality is changing across Europe and how these changes are affecting work-life balance (Drobnič & Guillén eds. 2011). Hence the theory and methodology in the article was not guided by this specific question. However, I took the liberty to re-interpret the results in light of gendered institutional theories to complement this study and to see whether the picture on Nordic exceptionalism is challenged. Furthermore, these perspectives together, theories on gender and class inequality in work life, guided me to take into account intersectional perspectives and compare gender gaps across employees in different positions and to seek answers to question *"Is the gender gap in job quality wider among higher educated Nordic employees?"* (article IV). These questions are dealt with in chapter 5.3.

When presenting the earlier drafts of article IV in seminars and conferences I was confronted with critique that the theoretical perspectives provided by institutional theories did not help in accounting for change. Neither did an individual article manuscript show awareness on limitations and critiques pointed towards the institutional theories. Inspired by the recent contribution by Hauptmeier and Vidal (2014 eds.) and their colleagues concerning the limitations of institutional theory as well as the limits of research departing from labour process analysis, I decided to incorporate our call centre article to the this study. The original research task was to look into the sectoral variation in job quality due to managerial strategies (article V). Similarly, as with regards to article III, this study and its analytical strategy was not planned to fit into the framework provided by the nexus of universal and institutional theories.

However, in this context, I use the case of call centre work as an example to illustrate how forces of globalization are visible in local processes. Furthermore, not to limit the analysis on the micro-level analysis on job quality outcomes and how they are affected by global and capitalist processes, I aim at demonstrating how processes detected on micro and meso level feed back to the macro-level, catalysing change in institutions and national employment systems. In other words, *are there sector or industry specific dynamics which might threaten quality of jobs as well as the institutions protecting job quality*? The aim is therefore to point out how sectoral logics may contribute to institutional fragmentation – and consequently pose threats to the Nordic model. These discussions take place in chapter 5.4.

Completion of this project has also required reflection on how this research and its results are positioned in the wider public, political as well as academic discussions on the current state of quality of work life, and its directions of change. The process of writing this compilation also included my search of how to position myself as a researcher within the field of working life studies –a field which is not only multidisciplinary but also wide and dispersed according to theoretical, methodological and ontological traditions.

In the compilation, the emphasis is on the development of the conceptual and theoretical framework and discussion of results in relation to them. The aim is to take some distance to the stereotypes pertaining to quantitative research inquiry and "abstract empiricism" described by C. Wright Mills in Sociological Imagination (1959) *"which refers to those forms of social survey research that involve quantitative research technologies to draw little on the theoretical tradition in sociology and contribute little to sociological understanding*." Completion of this dissertation, in other words, is marked by evaluation and analysis of the chosen methodological practices, how theoretical and methodological choices and restrictions affect what can be found and how it is interpreted. Thus, I conclude by describing the contribution of the results at hand as well evaluating the study through discussion of some of the methodological challenges of relying on survey data that I faced in studying changes in work life in this study.

TABLE 1 Research questions, datasets and methods

Sub-study	Research question(s)	Data	Methods
I. *Is Finland Different? Quality of Work among Finnish and European employees*	Is quality of jobs higher in Nordic countries compared to other European countries?	European Working Conditions Survey 2005	- Descriptive analysis -Analysis of variance -Regression analysis
II. *The Nordic difference? –Job quality in Europe 1995-2010*	Have Nordic countries managed to maintain high job quality despite various pressures for change?	European Working Conditions Survey 1995–2010	-Descriptive analysis -Linear and logistic regression models
III. *Job Quality Trends in Europe – Implications for Work-Life Balance.*	Is gender inequality in job quality higher in Nordic countries compared to Liberal, Continental, Southern and Eastern European countries?	European Working Conditions Survey 1995–2005	-Descriptive analysis and graphs for following the changing quality of jobs reported by men and women in five European country groups
IV. *Abating inequalities? Job quality at the intersection of class and gender in Finland 1977-2013*	Is job quality polarising? More specifically, is inequality rising between men and women in different class positions? Is gender inequality in job quality higher among the higher educated Nordic employees as the institutional theory postulates?	Finnish Working Conditions survey 1977–2013	-Descriptive analysis of changing job quality of women and men in different class positions; -linear probability model for testing the significance of the changes.
V. Engaged or not? Comparative study on work engagement and factors inducing it in call centre and service sector work.	Are there sector or industry specific dynamics which might threaten quality of jobs as well as the institutions protecting job quality?	Quality of life in a changing Europe-survey 2007 for Finland	-Survey: to compare job quality in call centres and other service sector jobs, hierarchical multiple regression analysis -Expert interviews: managerial strategies

2 CONCEPTUAL FRAMEWORK

> *"Quality of work life is a variable, approach, method(s), movement, everything and nothing – a concept which will soon mean whatever anyone claimed it means as much as it represents cure for every evil; conversely, it would no longer mean anything if it could not meet the expectations vested in it…"*

This is how US scholars Davis Nadler and Edward Lawler (1983) described the confusion around the concept of quality of work life (QWL) over 30 years ago. The lack of clarity around the concept of quality of work life – and its related concepts 'job quality' and 'quality of employment' – continues to exist. In this outlook to the history and conceptualization of QWL, I will lean to the original work of Nadler and Lawler (1983) on what QWL has meant and what it means today, to open up the apparent confusion around the concept. Quality of work life has been an economic, political and psychological issue which appeal has been fluctuating, forgotten and revitalized through time. Yet the growing body of research on the area of quality of jobs has not managed to generate a unanimous definition on the concept nor its measurement. As theoretical contributions have not been plentiful, it has become more common to understand and define QWL through its components: what does a good job consist of? Hence, the following chapters participate in the discussions on why QWL (or job quality) "mean whatever anyone claim they mean" as much as "it would no longer mean anything if it could not meet the expectations vested in it" (ibid.).

2.1 Historical outlook on the concept of quality of work life

First steps towards the development of 'quality of working life' concepts and measures can be traced back to the late 1960s and 1970s (e.g. Burchell et al. 2014; Davis & Cherns 1975; Martel & Dupuis 2006; Nadler & Lawler 1983). The post-war economies in US and Western European countries were not only marked by technological changes, growth of the service sector and increased

educational levels, but also by budget problems and concerns about productivity, while societal changes were also reflected in values. Consequently, the old compromise, where dehumanised work life was seen as an inevitable cost of acquiring material rewards above subsistence levels, was called into question. In this context, politicians, management, unions and researchers raised their interest in developing organisations. Ideas such as workplace democracy, participation and job satisfaction as precursors for productivity started to spread across the industrial world. The Hawthorn plant studies conducted by Elton Mayo in 1933 have to be mentioned here as a trigger for recognising the human and social factors that affected workers' performances (Mayo 1960). The results tempered the dominant management methods and laid the foundations for the human relations movement (Martel & Dupuis 2006). Although the vocabulary of QWL was not used, the developments were important in terms of fostering ideas for better working life.

Origins of the QWL concept can be derived from two main roots: in its uses as a *method* for work life improvement, and as a *variable* measuring worker well-being (Nadler & Lawler 1983). QWL has been a common denominator of the early practical experiments that took place at workplaces from the 1960s and 1970s onwards. QWL humanised work through specific 'programs', which were particularly aimed at enriching job contents and creating autonomous work groups. Nordic countries are often understood as the homelands of QWL programs. The pioneering QWL project, on industrial democracy more specifically, took place in Norway in the 1960s in cooperation of Work Research Institute, Confederation of Trade Unions, Confederation of Employers, and Tavistock Institute. The project examined and recommended democratising the workplace by introducing employee representation in company boards as a means to enhance QWL (Emery & Thorsrud 1969). Yet probably the most famous company cases are the Volvo plants in Kalmar and Uddevala, Sweden where new ways of organising work were implemented and which have gained continued interest of (Swedish labour process) researchers (e.g. Blomqvist & al. 2013; Sandberg 1995). Also, these projects benefited from ideas derived from socio-technical systems theory which was developed by social scientists under and around Tavistock Institute of Human Relations. Sweden is also famous for being the first country to make a national commitment to enhance QWL together with unions, employers and the political parties (Cherns & Davis 1975; Gustavsen 2007).

Socio-technically enlightened projects for work improvement also emerged elsewhere, such in the US, the Netherlands, Denmark and Germany, but they have been described as unorganised and isolated efforts not supported by the leading political parties to the same extent as in Sweden (e.g. Cherns & Davis 1975; Cummings & Molloy 1977; Martel & Dupuis 2006). Compared to other Nordic countries, Finland was a latecomer in the field of jointly organised, program-lead efforts for QWL improvement. The Finnish Workplace Development Program originates only from 1996 but has been renewed periodically. The program can be seen as a part of government-based

innovation policy (Arnkil & al 2003). Earlier in the 1980's there were no official development programs but theoretical discussions concerning work life development had entered academia and policy making arenas.

From the economic and managerial perspective, the core interest was to increase productivity. The novelty was that this aim was accomplished through enhancing worker motivation, job satisfaction and well-being. Furthermore, QWL was seen as unique approach as it engaged both labour and management under joint development programs (Nadler & Lawler 1983). Mutual win-win outcomes of these methods were heavily promoted as 'both the social and economic sides of work could be enhanced' (see also e.g. Cummings & Molloy 1977; Herrick & Maccoby 1975). However, the organisational development programs aiming at improving QWL could entail various means and be understood as panaceas for coping with most kinds of productivity or competition problems (e.g. Arnkil & al. 2003; Cummings & Molloy 1977; Nadler & Lawler 1983). This complexity and lack of clear means and methods increased confusion around the concept of QWL.

Popular interest fluctuated and the imported rivalling managerial ideas (such as lean production) took increasing space in organisations, but the efforts to develop QWL conceptualisation and projects continued by certain interest groups and scholars. The groups promoting QWL issues were created to the extent that QWL could also be understood as *a movement*. (Nadler & Lawler 1983; see also Huzzard 2003; Kiernan & Knutson 1990; Green 2006, 12-13.)

During the same period – from the 1960s and 1970s onwards – interest in measuring and collecting numerical information on QWL emerged. The concept of QWL was then understood as a quantifiable work life outcomes on the individual level, and thus QWL was understood as a *variable*. (Nadler & Lawler 1983.) The International Conference on the Quality of Working life in 1972 in New York is often cited as an initial attempt to begin to formulate coherent theory, practice and strategies for diffusion of knowledge on how to create a better working life. (e.g. Cummings & Molloy 1977; Davis & Cherns 1975; Martel & Dupuis 2006.) The conference and the subsequent book gathered knowledge on practical theory on the development of working life and methods of action research, and was the first effort to determine the central aspects of QWL and discuss definitions and measurements (e.g. Walton 1975). Substantial parts of these discussions were centred around the concept of job satisfaction and whether it is a valid measure of worker well-being and QWL (Lawler 1975; Seashore 1975; Sheppard 1975). The discussion has continued until today (e.g. Brown & al. 2012; Muñoz de Bustillo & Fernandez Macías 2005; Souza-Posa & Souza-Posa 2000).

The origins of variable-oriented views on QWL are closely linked to the emergence of the use of social indicators and research around 'quality of life' (QOL) indicators at that time. Prosperity increased in industrial countries together with many social problems – processes which called for deeper understanding on the major social and technological changes. The aim of the QWL movement was to counterbalance the measurement of well-being on

economic bases (such as gross domestic product) and develop a system of social accounts suitable for guiding policy decisions. Particularly, large international organisations, such as the UN, the OECD and the EU were interested in developing social indicators and social reporting. However, it was clear that QOL as well as QWL research lacked the appropriate data. Consequently, the 1970s was the advent of working life surveys in many countries, often governed by national statistical bodies. (Burchell & al. 2014; Cherns & Davis 1975; Lehto 1996.)

In Nordic countries, including Finland, the emergence of discussions on quality of working life and the establishment of the working life surveys were linked to this wider movement. In her dissertation, Anna-Maija Lehto, an expert from Statistics Finland with a long career on survey development, described the emergence of these ideas in Finland and identified the rising interest to utilise social indicators developed by the OECD and to gather new types of objective knowledge on working environments in the early 1970s. Based on Hartikainen (1980), Lehto (1996) argues that at that time it was suggested that the government should intervene and regulate working conditions more. The Finnish Working Conditions Survey was collected in 1977 for the first time by Statistics Finland but the planning and the initial 'pre-survey' took place in early 1972. These surveys were developed and extended in cooperation with other Nordic countries and have taken influence both from the Nordic tradition of collecting data on 'objective working conditions' as well as from the Anglo-American 'subjective' tradition that highlights the importance of job satisfaction as a measure for QWL. Lehto (1996, 23) further states that social indicators thinking leaned heavily on positivist social research, where designers of indicators believed that the indicators would be strongly linked to the purposes of governance and regulation of the welfare state.

Consequently, it is likely that the ontological and methodological differences of the two approaches that have employed the concept of QWL have contributed to the confusion. These concerns were brought up already back in the 1970s. The link between action research devoted to improving quality of working life and the development of social indicators was seen as weak, and its strengthening would have required close collaboration among individuals whose main interests and concerns, not to mention methodological approaches, had been widely separated (Cherns & Davis 1975). Others claimed that the above-mentioned problems of definition and application may also be a major reason why levels of academic interest in QWL declined in the 1980s and 1990s despite its paramount importance to workers, their employers and families, and to society as a whole (e.g. Martel & Dupuis, 2006). Contrarily, others claim that paradoxically, it is precisely the concept's alleged weaknesses – its ambiguity and open-endedness – that could be the secret to success of a concept (e.g. Davis 2008). The following chapters will focus on more recent 'variable oriented social indicators' research that has risen during the new millennium due to the renewed political interest in quality of jobs and especially the significance of employment and jobs at the core of the European Social Model.

2.2 Quality of work in the EU agenda

The role of European cooperation, especially in policy making, under and around European Union institutions, is of enormous importance for the development of international, comparative QWL research. The success of the 'American jobs machine' drew attention around the world, also in Europe. During the 1990s the US experienced a period of sustained economic growth, with falling unemployment and 20 million new jobs. But the question was posed – what kind of jobs? Were they mainly low-paid dead-end jobs in services whose creation was allowed due to a lack of regulation? From the European perspective, the protection of people's living standards and social status are politically, institutionally and culturally anchored in European societies, unlike in the United States (Burchell & al. 2014; Offe 2003). As paid employment traditionally formed the core of the European social model, the reasonable degree of quality of work is a precondition for the functioning of its welfare and employment systems.

Promotion of quality of work has figured prominently in EU treaties since the 1990s, which stipulates that Member States shall improve working conditions and living standards (Bothfeld & Leschke 2012). It was recognised in 1992 that improving the employment rate needed to be accompanied by a concern for the types of jobs that were created (EC 1992; Dieckhoff & Gallie 2007). Most research and policy documents however, cite the European Employment Strategy (EES) set in the Lisbon, Nice and Stockholm meetings in 2000 as an important point of departure for renewed debates and research on quality of work. It has been argued that the European Union's grand Lisbon agenda was explicitly motivated by the failure of Europe to generate jobs and growth in the same numbers as the US (e.g. Storrie & al. 2012). The strategic goal for the period of 2000-2010 was therefore set for the EU to become '*the most competitive and dynamic knowledge-based economy in the world, capable of sustainable economic growth with more and better jobs and greater social cohesion*'. The declaration may be seen to resonate the viewpoints presented in the previous chapter; of mutual benefits of improving worker well-being to increase productivity and economic growth, as well as the role of coordination and regulation of working life, now taken to the European level, as means of developing a sustainable and affluent society. Furthermore, EES was developed together with major social partners, which highlights the European tradition of social dialogue.

The process lead to a 'quality communication' that mapped out key dimensions of work quality and proposed a set of indicators by which progress should be measured. The so-called Laeken indicators (2001) consist of a portfolio of ten broad dimensions: (1) intrinsic job quality, 2) skills, lifelong learning and career development, 3) gender equality, 4) health and safety at work, 5) flexibility and security, 6) inclusion and access to the labour market, 7) work organisation and work–life balance, 8) social dialogue and worker

involvement, 9) diversity and non-discrimination, and 10) overall work performance. Each dimension was described in a form of statistical indicator(s), such as (long-term) unemployment rates, employment gap between men and women and length of maternity leave. The indicators were also applied in empirical studies such as Smith et al. (2008) and Davoine et al. (2008) that aimed to determine country patterns and variation in job quality across Europe (see also EC2008: Employment in Europe).

The centrality of the quality issues was supported by other supranational organisations: the OECD redesigned its employment strategy following the twin of the EU objective of '*More and better jobs'* (OECD 2003); and the International Labour Organization (ILO) launched the concept of '*Decent work'* in 1999, which aimed to systematically define, measure and follow up, also in less developed countries (ILO 1999; ILO 2008). The period is depicted, according to Peña-Casas (2009), as the '*golden age*' of '*quality in work and employment*' (QWE) in the European policy arena, which was determined by the succession of four supportive presidencies of the EU (Portugal, France, Sweden and Belgium) in a period of sustained economic and employment growth combined with a political context of a majority of left-wing and social-democratic governments among the Member States. This 'golden age' is also said to be the only period when social actors had a say, as the leading actors had successfully presented social matters to the Commission as economically relevant, by strategically transforming the struggle against unemployment and poverty into a positive fight for employment and inclusion (Barbier 2012).

However, very soon quality issues started to lose their priority in policy discourse. Whereas the original Lisbon program aspired to a balanced pursuit of economic, employment and social progress, the new objectives in the relaunch of the strategy in 2005 were set as: '*raising employment levels is the strongest means of generating growth and promoting socially inclusive economies*', suggesting that the social process would follow as a bi-product of growth and job creation (Dieckhoff & Gallie 2007). The shifting focus was said to result from a policy agenda that has become overloaded, failing co-ordination and conflicting priorities (EC 2005). With the arrival of Central European Member States and centre-right member states gaining the majority, the balance between social and economic actors also within the Commission, were said to have changed (Barbier 2012; Davoine & al. 2008). It is also argued that social partners were far less active with regard to the formulation on conceptualization of quality issues compared to influencing through resolutions and consultations on directives that relate to social and employment issues. Some of the central social actors interested in quality issues also lacked resources (Bothfeldt & Leschke 2012). However, most of the indicators under the Laeken list remained on the renewed European Employment Strategy, albeit under the title of Economic Guidelines, rather than explicitly as quality of work (Peña-Casas 2009).

The rivalling concepts also emerged. The idea of '*flexicurity*' was brought to the agenda and seen as, unlike the quality of work, a concept which assumes

synergies between employers and employees (Bekker 2011). Flexicurity is an integrated strategy for enhancing, at the same time, employers' need for flexibility and workers' need for security in the labour market (e.g. Wilthagen & Tros 2004). Flexicurity is advocated by guideline 21 of the European Employment Strategy 2007 and reconfirmed in the EU2020 strategy (EC2010). The unilateral focus on 'flexicurity' was also seen as a symptom of the marginalisation of social actors from political discourse (e.g. Bothfeld & Leschke 2012). However, Scandinavian actors, particularly those in Denmark, participated in the promotion of flexicurity (Barbier 2012).

Of especial interest is the fact that quality issues in the political discourse lost ground to *quantity* already before the economic crisis of 2008. The crisis and consequent prolonged period of sluggish growth faded the quality issues from the political agenda. According to Barbier (2012), the most recent period of the Europe 2020 strategy has witnessed a radical marginalisation and tokenisation of social policy as compared with macro-economic and financial concerns. In the "Agenda for new skills and jobs", which is part of the Europe 2020 strategy, improving quality of jobs is only one goal among others, not the leading slogan. Policy documents have recently emphasised the necessity of '*structural reforms*' and '*removing obstacles from employment and labour reallocation, increasing wage flexibility and improving incentives to make work pay*' (ibid.). Due to the downturn, the attention from quality of jobs has shifted to sustaining employment levels. Thus '*as a perquisite to the quality of work, inclusion and access to the labour market are obviously essential in this respect*' (EC2011).

Reasons for low influence of QWL issues on the political agenda abound. Foremost, the Laeken indicators of job quality faced much criticism, especially from academics (e.g. Davoine et al. 2008; Dieckhoff & Gallie 2007; Green 2006; Bothfeld & Leschke 2012; Burchell et al. 2014; Pena-Casas 2009). The indicators, mostly derived from national labour market statistics, were criticised for measuring labour market performance or employment regimes rather than quality of jobs experienced and reported by employees themselves. It was also pointed out that the operationalisation of several factors was unsatisfactory; for instance, intrinsic job quality was measured in terms of wage mobility (transitions between non-employment and employment and within employment by pay level). This particular choice is at odds with the usual broader understanding of wages as extrinsic quality while intrinsic qualities are possibilities for self-realisation in possibilities to develop skills, work independently and feel ones work useful (Green 2006; Eurofound 2012).

Furthermore, researchers analysing the policy documents that the choice of indicator(s) was due to difficulties in reaching political consensus. For instance, the debate on the inclusion of earnings as a job quality indicator was vivid. The original suggestion on wage or earnings indicators of QWL by the Commission included the share of low wage earners, the relative share of the working poor or inequality in income for this dimension. However, as a result of the position adopted by the United Kingdom and the Scandinavian countries, the definition does not include wage level at all as a component of quality,

whereas other countries (e.g. France) were in favour of taking this indicator into consideration. Instead, an agreement was reached by the introduction of a wage mobility indicator, and pay was also indirectly introduced as an aspect of gender equality. No agreement was reached on indicators on social dialogue, and exclusion of work effort was also largely seen as a defect of the Laeken indicators (Davoine et al. 2008; Green 2006; Pena-Casas 2009). Consequently, the concept of job quality was seen as weakly defined on the basis of a political consensus rather than by theoretical analysis. The indicators, if suitable for following up the changes in national labour markets, were criticised as unsuitable for academic analysis. Consequently, the indicators were condemned for being a result of disorganised aggregation of variables describing jobs, policies, participation rates and various forms of distributional inequalities. The politically vested interests and difficulties in reaching consensus, and inconsistencies and lack of theoretical ground were assigned as possible reasons for low influence on the political agenda.

Burchell et al. (2014) claim that overall impact of QWL concepts has been extremely limited compared to influence achieved, for example, by the Human Development Index (HDI) by the United Nations over a similar period. While it is easy to agree that it is desirable to live longer, healthier, happier and more educated lives, many labour market variables are disputable, as this chapter has introduced. Higher wages may be better for workers, but employers might argue they prevent employment creation. This poses particular problems for international bodies as well as national policy makers, where any progress in developing an agenda and measures for follow-up is based on compromises between the interests of employers, policy makers and employees.

Meanwhile, despite the fact that political discourse has turned to quantity of employment and QWL concepts are considered as having low impact, research focusing on job quality has proliferated in the new millennium (e.g. Sippola 2011). Why? seems like a valid question. According to Pena-Casas (2009), it might be due to a 'locking effect', which implies that once a concept has appeared in the European policy field and has been approved by European institutions, it cannot easily disappear. There is growing international research on definitions and measurements of quality of jobs as well as research comparing countries, following trends and discussing possible determinants of levels and trends in quality of jobs. There is general agreement that both the definition of the subject as a policy problem as well as the construction of a coherent framework for QWL indicators and monitoring tools represent necessary, albeit insufficient, steps to increase the credibility, usefulness and political power of the job quality concept (e.g. Bothfeld & Leschke 2012; Burchell et al. 2014; Muñoz de Bustillo et al. 2011).

2.3 Seeking a definition: what is a good quality job?

The preceding chapters introduced the emergence of the quality of working life concept and the changing and conflicting political interests around it. The concept of QWL is seen to have had limited impact both in academic research as well as in policy making due to disagreements on its meaning. This chapter will present in more detail the definition issues, which go beyond the lack of political consensus. The issues relate to a) incongruences in how job quality is defined through its components and b) the overlapping use of related concepts such *quality of work life, job quality, quality of work* and *quality of employment*.

Bibliographic searches from the 1970s onwards have found that very few scientific journal articles made efforts to better define the construct of QWL (Martel & Dupuis 2006). Another study based on the analysis of a significant number of scientific articles revealed that research conducted under the concept of QWL (or quality of work or job quality) could mean anything from employee characteristics to aspects of the job itself, such as pay or work schedules, and some studies dealt with workplace culture, social relations or even employment relations (Sippola 2011). Even when restricting the analysis to the more recent 'variable oriented social indicators' research on job quality, it is evident that there is significant variation in conceptualisation (e.g. Hauff & Kirchner 2014).

Where academics have reached an understanding, is that the importance of QWL resides from the fact that work affects the wellbeing of employees (Budd & Spencer 2015; Green 2006; Muñoz de Bustillo et al. 2011; Sirgy et al. 2001). However, there is no direct way to define or measure worker wellbeing – it can be done with different approaches. As raised in the historical review of the concept, the proponents of *subjective approach* suggest workers' evaluations of their job satisfaction as a valid proxy for job quality (e.g Diaz-Serrano & Vieira 2005). In other words, self-reported job satisfaction in surveys could be used as an indicator as good jobs are those where people report being satisfied. However, research has shown that subjective approaches to define job quality remain vulnerable to criticism (Brown et al. 2012), especially for cross-national research and studies of inequality. First of all, there are often discrepancies between objective conditions and subjective appraisals (e.g. Allardt 1976; Brown & al. 2012; Lehto 1996). The adaptable 'standards', i.e. norms and expectations of an individual, affect their assessment on job satisfaction and may conceal the actual level of working conditions. The capability to adapt expectations to current conditions has been used to explain why some (less advantaged) groups (e.g. women) have higher satisfaction levels than workers with objectively better conditions, if the more advantaged workers also have higher expectations (see also Alvarez-Galván 2012; Clark 1997; Muñoz de Bustillo et al. 2011). In a similar vein, for comparative purposes, the use of job satisfaction has proven challenging as empirical research shows that employees in different countries and in different occupations report similar levels of job satisfaction, even though they face vast differences in work and employment

conditions (Muñoz de Bustillo et al. 2005; 2011). For policy purposes the information on general job satisfaction is rather vague, as it lacks information on what the employees were thinking when answering the question and in what kind of conditions they actually work.

Furthermore, detecting changes in job quality by relying solely on subjective indicators such as job satisfaction, has also proven challenging. The notion of 'adaptive preferences' or 'adaptive standards' affects the reliability of highly subjective measures such as job satisfaction in studying processes of change. Employees may adapt either to expectations or to rising or declining conditions. For instance, it may be expected that workers' interests in job quality will grow, in parallel with economic growth, increasing educational levels and increasing service sector employment. Employees' changing preferences and values may affect subjective evaluations, which may be a question of a so-called 'hedonistic treadmill': a process where stable levels of well-being are reported although living or working conditions would have improved on objective measures. (see e.g. Burchell et al. 2014; Drobnič 2011, 3; Handel 2005; Muñoz de Bustillo et al. 2011.)

As such, relying solely on a subjective indicator of job satisfaction has largely been rejected in social scientific research as well as for policy purposes. Recent research has reached nearly unanimous consensus that QWL (job quality) is a broader concept than job satisfaction or that it needs to be measured in broader terms (e.g. Dahl et al. 2009; Green 2006; Muñoz de Bustillo et al. 2011; Sirgy et al. 2001). However, job satisfaction is often included among other indicators (Green 2006) and is seen as having value when interpreted with caution (Brown et al. 2012).

A strategy for defining and measuring job quality that has become widely accepted, is defining it through its components. Thus, job quality is understood as an umbrella concept that gathers under it factors that are important to employee wellbeing. This approach is often labelled as '*objective*' as they prescribe the factors (based on a theory) that must be present in work situations in order for worker wellbeing to be realised and thus for the job to be of high quality. (e.g. Budd & Spencer 2015; Gallie 2007; Green 2006; Muñoz de Bustillo et al. 2011). This definition implies that certain jobs are good regardless of who holds them (Tilly 1997) and therefore does not consider the particular job holder's preferences or expectations.

The Laeken indicators fall also under the objective approach where job quality is defined through its components. Surprisingly, the aspects of job quality to be taken into consideration were similar as the ones formulated in the International Conference on the Quality of Working Life in 1972 in New York (Walton 1975). Although how, for instance, intensification of work and work-life balance are emerging issues due to recent societal changes, such as changing nature of work as well as increasing dual earner families has been widely discussed, they were present already in the 1970s as important aspects for employee wellbeing (see table 2).

TABLE 1 Dimensions constructing a good quality job

Dimensions of job quality	Walton (1975) Criteria for Quality of Work Life	Laeken indicators EC2001	Green 2006	Gallie 2007; 2013	Munoz de Bustillo & al. 2011	Leschke & al. 2008	Holman 2013a
Skills *Development* *Training* *Job content* *Complexity*	*Multiple skills *Whole tasks *Development *Advancement	*skills, life-long learning and career development	*skill requirements: qualification, training, learning time	*training	*training *development opportunities *skill utilization	*access to training and career advancement	*variety *complexity *cognitive demands *training *development opportunities
Autonomy *Team work*	*Autonomy		*discretion	*autonomy	*autonomy	*autonomy	*discretion *team work *team autonomy
Participation	*Information on the work process *Planning *Free speech *Equitable treatment *Due process	*social dialogue and worker involvement				*collective interest representation and participation	*discussions with boss and employee consultation on future changes
Pace *Intensity* *Pressures* *Work load*			*effort	demands, stress (in relation to work-family conflict)	*work load *intensity		*pace and amount of work *interaction demands *timing dependence
Job insecurity	*Employment or income security	*flexibility and security *Inclusion and access to labor market	*perceived insecurity *difficulty in re-employment	*perceived insecurity *temporary & part-time employment		* non-standard forms of employment	*perceived insecurity *non-standard contracts
Wages	*Socially determined standards of income *Fair pay compared to pay from other work	*"intrinsic" job quality (wage mobility)	*wages	*wages	*wages	*wages	*wage level *performance pay *compensation pay *group pay

Working time Work-life balance	*Balanced role of work in terms of work schedules, career demands and travel requirements	*work-life balance and work organization	*hours worked (in relation to effort)	*work-family conflict	*Work hours, scheduling & flexibility	*work-life balance and working time	*Work scheduling & flexibility
Working conditions Health and safety	*Reasonable hours *Physical working conditions	*health and safety at work	*accident risk (in relation to insecurity)		*Physical environment *Health	* working conditions and job security	*physical demands *ambient demands *psychological health *physical health
Social relations	*Social support *Sense of community in organisation	*diversity and non-discrimination			*social environment		*social support
Well-being / satisfaction			*job satisfaction				*job satisfaction
Meaningfulness	*Social relevance of work						
Outcomes		*performance *productivity					
Labour market		*gender equality					

The debate around the Laeken indicators and its aftermath has yielded extensive academic efforts in defining job quality and improving its measurement. Despite shifting focus in policy discourse, EU bodies, especially the Committee on Employment and Social Affairs of the European Parliament and the European Foundation for Improving Living and Working Conditions, continued their efforts (e.g. Eurofound 2012; Muñoz de Bustillo et al. 2009; 2011) to provide resources for a group of researchers to develop definitions and measurements – a project that resulted in a compound *job quality index* (JQI). In addition, the European Trade Union Institute (ETUI) (Leschke et al. 2008) developed their own definition and measurement tool in a form of a European job quality index (JQI) for following overall changes in job quality and to allow comparisons across countries. These two indexes are broadly similar and have included *pay, intrinsic quality of work* (skills, autonomy, meaningfulness, social support), *employment quality* (type of contract, development opportunities), *health and safety* (physical and psychological risks) as well as *work-life balance* (duration, flexibility and scheduling of working time, intensity). The ETUI-JQI further included indicators such as *share of part-time employment* and *collective interest representation* (collective agreement coverage and trade union density) but excluded elements such as social relations and meaningfulness (Leschke et al. 2008).

As seen with the JQIs above, the objective approach is evidently an interdisciplinary approach. The important factors for worker wellbeing are dispersed across social sciences, economics and work psychology, among others. The most influential, coherent and widely cited frameworks for studying quality of jobs within social sciences have relied on theories with Marxist roots, such as labour process analysis (e.g. Braverman 1974) and segmentation theories (e.g. Doeringer & Piore 1971). Duncan Gallie in his extensive and ground breaking research (e.g. 2003; 2007; 2013) relied on sociological and psychosocial traditions that stress the importance of use of *skills* and *autonomy* (but also *effort* and *insecurity*) in the determination of worker well-being. Francis Green (2006, 13-15) relied on Amartya Sen's (1999) ideas on capabilities in understanding quality of work and suggests that well-being depends on the 'capabilities' of people to achieve certain 'functionings' (doing and being things of value). According to Green's seminal scholarship, quality of work is defined in terms of several key factors, namely *skill and discretion, intensity, health risks, job insecurity, pay* as well as *job satisfaction*. In extreme cases, in the concept of job quality has been used somewhat interchangeably with working conditions, thus including all possible elements and variables the survey contains, as so many aspects could be understood as important for employee well-being (e.g. Tangian 2007).

Research in social sciences aims to take some distance from economics, which has a long tradition of relying on wages as a measure of good and bad jobs (e.g. Goos & Manning 2007). While acknowledged important, it is not a sufficient approach for studies in social sciences or for social policy as wellbeing is affected by many other important components. It has also been discussed that

the relationship between wages and broader quality of jobs is not straightforward: for instance, jobs in the middle of wage distribution (e.g. traditional industrial jobs) do not necessarily offer possibilities for skills use, development or advancement and might be physically strenuous (e.g. Eurofound 2013). In addition, job quality research as well as social policy have benefited from research in occupational medicine, health and safety, and in work psychology concerning the physical and psychological risks related to work. Especially important have been studies of delineating determinants of subjective well-being and motivation that utilised surveys and psychometric techniques (e.g. Herzberg et al. 1957; Siegrist 1996). This tradition is strongly empirical in nature and has no unified theoretical approach behind it.

Defining and measuring job quality through a broad range of components is widely accepted but has not remained without critics. Many studies highlight the insufficiency of assessing job quality merely via a checklist of job components, as they represent a highly normative approach in determining what a good job consists of. Objective approaches may be seen as elitist expressions of perceived academic (and theoretical) expertise; workers' preferences, subjective appraisals of their well-being and factors influencing them are overlooked (e.g. Budd & Spencer 2015; Cooke et al. 2013). It has been argued that the match between the worker and the job should be considered. The objective approach does not usually allow the evaluation of the extent to which employees perceive the job has fulfilled their personal preferences. According to 'relative definition', QWL (job quality) means different things to different people – according to their status, health, household situation and life stage (Kiernan & Knutson 1990, 102; Pocock & Skinner 2012). For others, broader meanings of work should be considered in discussions concerning work quality: how people participate in meaningful relationships, reproduction and care, and society. In other words, the non-job factors that play a central role in employees' lives should be taken into account when assessing work quality (Budd & Spencer 2015; Cooke 2013). However, there is already a large body of literature concerning differences between countries and changes in work orientations and work values (e.g. Turunen 2012; Gallie 2007d; Hult & Svallfors 2002). Therefore, if work values would be integrated under the concept of work quality, there is a risk of increased confusion around the concept and its measurement.

As further critique has been that the objective approach often includes some amount of subjectivity. Ironically, in studies using survey data (in contrast to "purely objective" statistical indicators), the questions are objective in so far as they ask about job characteristics such as level of autonomy rather than satisfaction. Hence, anyone asked such questions will be judging autonomy against some personal standard and as such, are subject to similar biases as measures on job satisfaction. Thus, instead of job quality described in terms of objective job characteristics, the term 'self-reported job quality' might be better. (Sengupta et al. 2009). The level of subjectivity in survey research may be reduced by formulating question and answer categories in such a way that

respondents simply report whether a certain aspect is present (or not) in their work (see also chapter 4.2.).

2.4 From QWL to job quality: beyond semantics

Despite the apparent consensus on job quality as a multidisciplinary umbrella concept measured through various indicators, there is no consensus over the aspects to be included under the concept. There is variation in the aspects included, as introduced in the previous chapter, but also variation regarding the vocabulary concerning the concept itself.

The use of terminology has been colourful and developing: much of this above-mentioned research both within the subjective as well as objective traditions and including diverging job quality indicators, refer to "*job quality*" (e.g. Clark 2005; Grimshaw & Lehndorff 2010; Holman 2013a; 2013b; Holman & MacClelland 2011; Kalleberg & Vaisey 2005; Leschke et al. 2008; Meagher, Szebehely & Mears 2016; Muñoz de Bustillo et al. 2011; Olsen, Kalleberg & Nesheim 2010; Sengupta, Edwards & Tsai 2009; Stier & Yaish 2014; Findlay et al. 2012). Others have chosen the term "*quality of work*" (Gallie 2007a book Gallie et al. 2013 book) or "*quality of employment*" (Burchell et al. 2014; Gallie 2007c) and others above mentioned these interchangeably, without analytical precision (e.g. EC2001; Smith et al. 2008). At times, "*quality of work life*" is also used in quantitative research (e.g. Gallie 2002; 2003; Heiskala & Jokinen 2014).

Searches based on JSTOR and Google Scholar revealed that the use of job quality increased, especially during the new millennium (e.g. Burchell et al. 2012; Sippola 2011). Although for some it is purely a question of semantics, it is also possible to analyse implicit connotations related to the concepts. QWL as a concept is largely associated with workplace development programs (e.g. Martel & Dupuis 2006; Sippola 2011). While not voiced explicitly in research documents, it is possible that 'the variable-oriented research tradition' has been diverging towards related concepts such as '*job quality*' to distinguish itself from 'QWL as a program' tradition as suggested by Green (2006, 21): The policy documents and research around EU institutions have chosen to use '*quality in work*' or '*job quality*' in anticipation to mitigate the politically vested interests – which might not have worked out as expected, as discussed in the previous chapter. In a publication concentrating on conceptual framework, Peña-Casas (2009) chose the phrase "*quality in work and employment*" (QWE) to implicitly focus on the intrinsic content of jobs – yet the choice of wording was only discussed in a footnote. The question follows then, that beyond semantics, why is there such a variation in concepts used? It may be argued that while much of the research has concentrated on conceptualisation through the choice of indicators (as was the case with Laeken indicators), there have not been many efforts to explicitly clarify the use of terminology: the concept of job quality itself or its relationship to other related concepts.

The critique the Laeken indicators faced, however, accentuated demands that when referring to *job quality*, the choice of indicators should be restricted to the *level of a job*. Consequently, in more recent research literature, the definition of job quality excludes indicators that are seen to describe the labour market (e.g. unemployment rate) or welfare state benefits (e.g. length of maternity leave) (Bothfeld & Leschke 2012; Dahl et al. 2009; Green 2006; Holman & MacClelland 2011; Holman 2013a; 2013b; Muñoz de Bustillo et al. 2011). This implies the omission of any factors that have impact on wellbeing of workers but cannot be considered as attributes of their jobs (such as social support outside workplace, the availability of employment, or income distribution). In addition, the definition is sought from the side of employee well-being, and possible outcomes on the level of the organisation (or society) are not included. The separation of various levels of measurement is justified as it may be understood that institutional frameworks affect job quality.

These discussions have yielded further demands for the clarification of the QWL concept and for the separation from of what job quality consists of. The varying definitions are gathered in Table 3 below. Burchell with his colleagues (2014) use '*employment quality*' as a rooftop concept that gathers under it the related concepts of quality of working life, job quality as well as work-life balance, labour relations and rights and gender gaps. According to their understanding, QWL is predominantly linked to workers' own evaluations of their jobs whereas 'job quality' or 'quality of work' often focus on job content and work environment. Gallie (2007c) also relies on the concept of quality of employment when studying factors both at the level of a job (task discretion and influence over work organisation) and at the level of the labour market (union density, unemployment). This conceptualisation, however, contrasts with other recent definitions that propose job quality as the rooftop concept.

TABLE 2 Interrelationships between various concepts

Job quality	**Quality of work**	**Quality of employment**	**Empowerment quality**
		Burchell et al. 2014 Employment quality = job quality + QWL + labour market indicators	
	Gallie et al. 2007; 2013 Quality of work = *autonomy * training, *intensity *insecurity	Gallie 2007c review Quality of employment = task discretion, union density, influence over work organization, job security, unemployment	
Green 2006 job quality =			
Muñoz de Bustillo et al. 2009; 2011 Job quality = work quality + employment quality (leaving out the labour market indicators).	*Autonomy *Intensity *Social environment *Physical environment *Health	*Type of contract *Wages and benefits *Work hours, scheduling & flexibility *Formal (vocational) training.	
Grimshaw & Lehndorff 2010 Job quality = work + employment + empowerment quality Used in Holman & MacClelland 2011; see also Holman 2013a; 2013b	*work organization = *Job design*: discretion, demands, physical conditions & *Team design:* autonomous work groups	*wage and payment system *security and flexibility	*skills and development *collective representation and voice
Leschke & al. 2008; 2012 Job quality = *wages * non-standard forms of employment *work-life balance and working time * working conditions and job security * access to training and career advancement, *collective interest representation and participation			

In the conceptualisation formulated by Muñoz de Bustillo et al. (2009; 2011), job quality is a sum of quality of work and quality of employment. In a similar token, for Grimshaw and Lehndorff (2010) job quality consists of work, employment and empowerment quality. In turn, David Holman (see Holman & MacClelland 2011), relied on the conceptualisation formulated by Grimshaw and Lehndorff (2010) and later, without making explicit reference to empowerment quality, merged its contents to employment quality (2013a; 2013b).

Despite the use of various terms and the confusion that go with that, these conceptualisations merge, as the understanding of contents of work and employment quality are broadly similar. *Work quality* includes factors that relate to certain jobs/tasks and its work organisation (i.e. autonomy, intensity, physical and psychosocial conditions) and *employment quality* relates to factors determined by contracts (wages, work hours, type of contract, security/skill development). More specifically, job quality is the umbrella concept gathering under it work and employment quality (yet excluding the labour market indicators). The division could be criticised for merely increasing complexity and confusion around of the concept of job quality on the other hand, and on the other hand the division could be useful for the purposes of social policy, as it is necessary to separate levels of intervention (firm, social partners, national/EU legislation) and for determine accompanying instruments when formulating policy recommendations (see e.g. Bothfeld & Leschke 2012; EC 2001).

Most research in the area have not, however, discussed the interrelationships between the varying concepts or justified their choice of terminology. The strategy is more straightforward as mentioned – to define that job quality measured through its components at the level of a job (e.g. Green 2006; Leschke & al. 2008). A similar strategy was applied by Gallie (2007a), who despite using the label "quality of work", does not create a conflict with job quality definition as both definitions and measurement were restricted to objective characteristics of a job. Some studies referring to job quality, although explicitly stating restricting the definition and measurement to the level of job, include measures of participation, consultation and voice (e.g. Leschke et al. 2008; Holman 2013a), which could be regarded as factors describing the institutional setting not the job itself.

Issues that have largely been neglected in recent literature, but further contributing to the confusion in job quality studies, are the diverging *analytical strategies* (Hauff & Kirchner 2014; Tilly 1997; Sengupta et al. 2009). The most common strategy has been to rely on measuring discrete dimensions of job quality, which is labelled as '*system of indicators*' (Muñoz de Bustillo et al. 2009; 2011). These individual indicators (or sub-indices) are then brought together to form an overall picture on job quality on a country level or to describe job quality of various groups of employees (women, socio-economic groups, temporary employees). This type of strategy has been followed in several studies while the indictors included have varied (see e.g. Eurofound 2012; 2015;

Gallie et al. 2007; Green 2006; Greenan et al. 2010; Olsen, Kalleberg & Nesheim 2010; Peña-Casas & Pochet 2009; Tilly 1997), including the individual research articles in this study.

Nevertheless, studies relying on analysis of 'systems of indicators' and referring to *job quality*, i.e. analysing discrete dimensions one by one, do not actually describe a job as such – neither do studies constructing a composite job quality index. In contrast, there are studies that aim to evaluate quality not only at *the level of a job* but *in a job.* In other words, these studies build a taxonomy of job types and identify how various aspects of job quality are accumulated in a certain role, thereby creating jobs that are more favourable for wellbeing (such as jobs with high autonomy, high pay) than others (high demands but low rewards) (i.e. Holman 2013a; Gallie & Zhou 2013; Lorenz & Valeyre 2005; Sengupta et al. 2009; Valeyre et al. 2009).

Hence, to increase clarity, it would be possible in future research to refer to "quality of work (life)" when measuring discrete dimensions of work experience (i.e. relying on 'system of indicators' as analytical strategy). These studies often aim to describe macro-level differences or trends in terms of certain individual aspects of a job, and when gathered together, the results form an overall picture of "quality of work life". Nevertheless, the indicators should be kept, as suggested, strictly at the level of a job, especially for comparative purposes, to not to confuse them with the specificities of the institutional settings. In contrast, the concept "job quality" could be limited to studies using 'jobs approach', i.e. to analysis referring to actual jobs and ways in which these characteristics are combined in a job.

2.5 Conceptual framework of the study

This study relies on the concept of job quality, which, based on the conceptual analysis, is by definition restricted to the level of a particular job and excludes indicators that are on the level of the labour market. No analytical distinction is made between work and employment quality, however. Based on the literature review, I have narrowed down the aspects of job quality that affect the well-being of workers into four central aspects: a) possibilities to use and develop skills at work, b) autonomy, c) work effort, and d) job insecurity. The available studies on job quality highlight a convergence of the various approaches across and within disciplines over time (chapter 2.4. above, see also e.g. Pichler 2014).

The choice of aspects and indicators is guided by the theoretical discussions and their centrality in most recent research in social sciences (see also table 3; Gallie 2007a; Green 2006; Osterman 2013). This approach it is not chosen to neglect the meaning of other possible factors affecting job quality or individual preferences concerning the most valued aspects of a job. The choice was constrained by pragmatic reasons related to data and measurement which are tackled in more detail in the methodology section, to ensure the coherence of the theoretical framework, as universal and institutional theories do not have

much to say about how, for instance, social relationships or commuting time to the workplace are affected by institutional frameworks (see also Gallie 2007a). This chapter briefly presents the definitions of each aspect and the justifications for the selected aspects as central for well-being of employees.

2.5.1 Possibilities to use and develop skills

Discussions of and research on the quality of work life generally concentrate on paradigmatic perspectives about what comprises a 'good job'. Despite rather different theoretical premises, mainstream neo-Marxist (Braverman 1974) and neoliberal (Blauner 1964) quality of work life theories came to share the view that the nature of work tasks and work organisation were central aspects for individual well-being and job satisfaction. (Dahl et al. 2009; Gallie 2003; Kalleberg et al. 2009). The possibilities to use and develop skills were deeply rooted in the tradition of humanisation of work life and as such, an integral part of many work-life development programs (Cherns & Davis 1975; Herrick & Maccoby 1975). Moreover, in management theories and organisational research, similar factors have been associated with higher productivity and greater success of companies. High-performance management practices emphasise enrichment of jobs through job rotation and the creation of more complex tasks and more opportunities for learning (e.g., Godard 2004).

The most recent contribution to the debate on why skills are a central aspect of job quality is related to the need to combine flexibility and security in the labour market. The opportunities for developing and using skills at work are thought to be central for job quality because they create opportunities for internal or external professional mobility, and for finding a new job in case of dismissal; they thus constitute a general increase in employability (EC 2008). Formal training provided by the employer and other possibilities to further develop and renew skills are becoming essential for keeping up with changes in work life as well as for further employability. Furthermore, many developed Western countries have started to emphasise that since they cannot compete with developing countries in mass production, their economic sustainability depends upon production quality, high skills and creativity.

In sociology, *skill* is the degree of complexity of work (Green 2006, 28). Consequently, complexity, variety, and cognitive content of work are often taken as a resource in job quality studies (e.g. Eurofound 2012; Munoz de Bustillo et al. 2011, 164), although at times, they may also be recognised as demands, which require effort (e.g. Berglund et al. 2014; Holman 2013a). Skill also refers to education or qualifications as well as to the training and development opportunities the job or employer provides. In addition, in job quality studies the focus is on the jobs, not the people performing them, and as such the measurement should be separated from the 'abilities to use one's knowledge' (Green 2006, 28; Munoz de Bustillo 2011, 163).

Various data provide a wide range of measures used to assess skill requirements, the level of complexity (in contrast to monotony) as well as training provided by the employer. The European Working Conditions Survey

contains some items covering skills use at work, including task complexity, problem-solving, job rotation, frequency of computer use, employer-provided training, on-the-job training, and learning. Often-used indicators for describing good possibilities for skills use are: "does your main job include monotonous tasks, complex tasks or learning new things", or "assessing the quality of your own work" (e.g. Eurofound 2012; 2013; Green et al. 2013; Greenan et al. 2014; Lorenz & Valeyre 2005; Munoz de Bustillo et al. 2011; Smith & al. 2008). Training (paid by the employer) may be understood as describing employees' possibilities for skill development (Dieckhoff et al. 2007; Green et al. 2015; Inanc 2015; Warren & Lyonette 2015; Munoz de Bustillo et al. 2011; Sutela & Lehto 2014). The European Social Survey questionnaire (2004) collects information on "what training or qualifications are needed for the job?" and whether "current job offers variety in work" and "job requires learning new things" (e.g. Muhlau 2011). ISSP includes items on "my job gives me a chance to improve my skills" and "my job is interesting" (e.g. Clark 2005; Olsen, Kalleberg & Nesheim 2010; Stier & Yaish 2014).

Autonomy

Similar worries of alienation have been related to autonomy in relation to complexity and skills development – especially the Marxist tradition, which underlined how separation of planning and execution of work are destructive for individuals' possibilities for self-realisation (Bravermann 1974). Critique was pointed towards growing dominance of Taylorist principles of management and Fordist production techniques involving machine-based work by assembly lines; stripping employees of discretion and isolating them from co-workers. If there was no discretion or craftsmanship left, one might as well be a machine (Green 2006, 94).

Equally, in work psychology and occupational health sciences, workers' discretion is an essential resource. Together with work demands, the autonomy aspect forms the core of psycho-social models of workplace well-being. Little leeway 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). The multifaceted relationship between (managerial) control and (workers) autonomy and the centrality of these issues for employee wellbeing has led to an emphasis on task discretion as one of the most central aspects of job quality (Gallie 2007; Hauff & Kirchner 2014).

Autonomy is also closely correlated with various dimensions of skills. The exercise of a high level of discretion requires correspondingly high level of skills, which is often combined with high education and jobs requiring qualifications. To plan and make decisions concerning their work, to solve

problems independently, take responsibility and perform complex tasks, the workers must be equipped with adequate skills (e.g. Green 2006).

The European Working Conditions Survey data provides a wide range of attributes understood as components of work autonomy, such as team autonomy, dependency of work pace on colleagues, clients or pace of a machine, ability to apply own ideas, influence choice of working partners as well as the ability to choose or change the order of tasks, work methods or speed of work. However, the most common way is to rely on the last three items: the ability to choose or change the order of tasks, work methods or speed of work (see e.g. Berglund et al. 2014; Eurofound 2015; Greenan & Kaluniga 2013; Leschke, Watt & Finn 2008; Lopes, Lagoa & Calapez 2014; Smith et al. 2008). Studies using European Social Survey operationalise autonomy in terms of 'how much the management allows you to decide how your daily work is organised, to influence policy decisions about the activities of the organization and to choose or change the pace of your work (e.g. Esser & Olsen 2012; Gallie & Zhou 2013) whereas International Social Survey Program and General social survey data only captures agreement to statement: 'I can work independently' (Handel 2005; Olsen & al. 2010; Stier & Yaish 2014).

Work effort

For Green (2001, 53), work effort 'is the rate of physical and/or mental input to work tasks during the work day'. With regards to terminology, intensity of work, work pressure and work effort are used rather interchangeably. The measurement of "input" in a person's work is ambiguous, and objective measures, such as work hours, do not necessarily catch the tempo of work during the time spent at work nor the level of mental effort and strain in and even outside of work. Although in some studies measures of performance and productivity have been used as proxies to study work effort, they should be conceptually separated both at individual and organisational levels. Productivity may be increased by exerting more effort but also improving skills (Green 2001; Gallie 2005). In addition, there are multiple factors such as the organisation of work, technology or other innovations that have potential to boost productivity. Thus, measuring effort does not equal measuring productivity or performance.

Also, work effort may be seen to be linked to or overlapping with wider concepts of job demands. Mostly used in work psychology studies, a balanced setting of demands and resources is essential for employee well-being (e.g. Karasek, 1979; Demerouti et al. 2001; Schaufeli & Bakker 2004). Job demands may refer to various categories of work that cause strain such as cognitive, emotional, interaction and physical demands, and work load (see Holman & McClelland 2011).

Work pressure is an important indicator of job quality as it has several implications for the employees' physical, mental and social well-being. For instance, 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). Excessive work intensity is problematic as it impedes working conditions as workers might compromise health and safety issues and have difficulties to find time to learn new things (for a short overview see Burchell et al. 2009). The effects of work pressure are also likely to spill over to other areas of life and have negative outcomes for families and social life: previous research found that work pressure is strongly linked to work-family conflict (Gallie & Russell 2009; McGinnity & Calvert 2009; Scherer & Steiber 2007; van der Lippe et al. 2006)

Despite the vast evidence, there remains discussion on whether work pressure is actually harmful – and at what levels - to employees' well-being and consequently, whether should it be included among job quality measures. Although exerting effort may be due to organisational policies, supervisory pressures, pace determined by machines, clients or colleagues, it may also be the result of individual choices (e.g. Gallie & Zhou 2013). Yet, data separating discretionary effort from constrained effort is scarce (see Green 2001). Also, as individual resources to cope with demands vary, it has been argued that it is difficult to determine a certain risk level of effort. Nevertheless, it has been established situations where high work effort is combined with low decision latitude is more harmful for employees' health and well-being, compared to where the degree of employees' control over work is higher (Karasek & Theorell 1990).

Consequently, there is an increasing amount of research that aims to conceptualise good and bad jobs in terms of how autonomy and effort are combined in a certain job: high effort jobs are not seen as harmful but instead as good, active jobs if combined with high autonomy (e.g. Holman 2013a; Gallie & Zhou 2013). In this study, however, I examine these factors separately and understand work effort in line with Green (2001; 2006) as subjectively evaluated experiences on the effort they exert at work.

Measurement of work effort in different studies concentrates mostly around two aspects of work pressure: items prescribing intensity or exerting effort and items relating to the timeframe of work. EWCS includes questions on 'working under tight schedules and timetables' and 'working at very high speed' (e.g. Davoine et al. 2008; Green et al. 2013; Greenan et al. 2014; Munoz de Bustillo et al. 2011; Smith et al. 2008). It is debatable whether these measures capture intensity and effort as a negative factor. For instance, professional work often is responsible, intensive and requires effort. However, it is debatable at what level the effort exerted becomes harmful.

Finnish working conditions surveys have included multiple items enquiring about 'hurriedness as a disturbing factor' as well as what the factors are that make jobs less enjoyable with answer categories such as 'time pressure and tight time schedules' and 'enforced pace of work'. They also included 'I often give up breaks because of workloads' (see e.g. Lehto & Sutela 2008). These items specifying hurriedness as a problematic work environment factor, are a

way of avoiding the problem of defining the "non-problematic level of intensity" –employees themselves evaluate whether it is the case and in some cases to what degree.

Further measures to capture hurriedness or increasing pressures of different types of jobs and work environments have been developed. For instance, the measurement of hurriedness might also overlap with measures of work time. The European Working Conditions Survey also contains possible responses such as 'I never seem to have enough time to get everything done in my job' (see also Gallie 2015). Hurriedness may also lead to over time ('I often have to stretch my working day' in Finnish Working Conditions Survey) or informal overtime and work at home (e.g. Ojala, Nätti & Anttila 2014).

Job insecurity

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-actualisation and provides structure to a person's life (Jahoda 1982; Paugam & Zhou 2007). Moreover, work enhances available resources and connects individuals to their social environments (Barnett & Hyde 2001). Therefore, ambiguity related to the future of a job is a significant source of stress (Sverke et al. 2002). In some studies, the psychological consequences of uncertainty were found to be relative to actual unemployment or redundancy (Green 2006, 129; Julkunen 2008, 115).

Fixed-term contracts are also problematic as they offer lower job security, less work autonomy, higher time strain and less access to on-the-job-training to foster future employability (e.g. Ojala, Nätti & Kauhanen 2015; Scherer 2009). In addition, careers are more porous with fixed-term contracts, and the risk of unemployment spells higher (Ojala, Nätti & Kauhanen 2015). Furthermore, job insecurity is associated with work-life imbalance (Beham & al. 2011; Gallie & Russell 2009; Scherer 2009). Perceived job insecurity and fixed term contracts have repercussions for later life as they have negative effects for having children in the near future (Scherer 2009; Sutela 2013). Therefore, having permanent jobs and future prospects in a job are essential for the well-being of workers.

Although usually conceptualised similarly as job insecurity, distinct studies use rather varying indicators that may be broadly divided into "objective" and "subjective" measures: in this study I refer to objective insecurity when statistical indicators such as job tenures or share of fixed-term or non-standard contracts are considered. It is a well-known fact that these measures are problematic as, for instance, they do not reveal whether job changes and temporary jobs are involuntary or positive in terms of career advancement. Additionally, there is large variation in security and quality of non-standard contracts.

In contrast, a "subjective" indicator of job insecurity is the perceived labour market risk reported by the employee, such as fear of losing ones' job

(such as in EWCS; see Berglund et al. 2014; Eurofound 2012; or in Finnish Working Conditions Survey, see e.g. Lehto & Sutela 2008; Ellonen & Nätti 2015). Fear of losing ones' job has also been conceptualised as affective or cognitive insecurity (Berglund et al. 2014). The issue of job insecurity may be approached also inversely as perceived job stability, i.e. "my job is secure" as done in European Social survey (see e.g. Erlinghagen 2008) or in International Social Survey Program (e.g. Clark 2005; Olsen, Kalleberg & Nesheim 2010).

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 organisational changes (Lehto 2009) or previous unemployment experiences (Green et al. 2001). Furthermore, risk awareness, such as in fears of losing one's job, are rather sensitive to the economic cycle, and thus fluctuate according to the perspectives of industry of employment and the national and global economy (see e.g. Green 2009; Sutela 2013). Although there might be a large variation in factors causing the perceived high job insecurity, it may be understood as an important indicator of job quality. Furthermore, employees' estimation of future insecurities is positively correlated with actual job loss (Dickerson & Green 2012; Green 2006; Klandermans et al. 2010).

More recently, the understanding of job insecurity as a complex phenomenon with various aspects has led to wider conceptualisation and measurement. Discussions concerning rapid change in work life have particularly emphasised how labour market policies should not aim at securing a certain job the person is holding but to increase security and flexibility in careers simultaneously. Consequently, broader forms of labour market security – job, employment and income security – have been separated (e.g Berglund et al. 2014; Wilthagen and Tros, 2004). This research, however, concentrates on non-standard (fixed) contracts and perceived job insecurity.

3 THEORETICAL FRAMEWORK

From a theoretical perspective, the question of existence and persistence of Nordic working life model is situated at the nexus of institutional and universal theories (Figure 1), inspired by the work of Duncan Gallie (2007a). Universal theories encompass diverse scenarios concerning broad trends in work life, such as those discussing the implications for the rise of the knowledge society, technological change and globalisation. Theories may be further classified as optimistic (e.g. *post-Fordist, post-bureaucracy, post-industrial*) and pessimistic (e.g. *neo-Fordist, effort-biased technological change*), based on their prognoses concerning degradation or enhancement in working conditions. What makes them universal is that they share the view that these trends are so pervasive that the changes in the nature of work will be very similar across the industrialised world. (Gallie 2007a.) In other words, these discussions suggest *convergence* in job quality across countries and regimes.

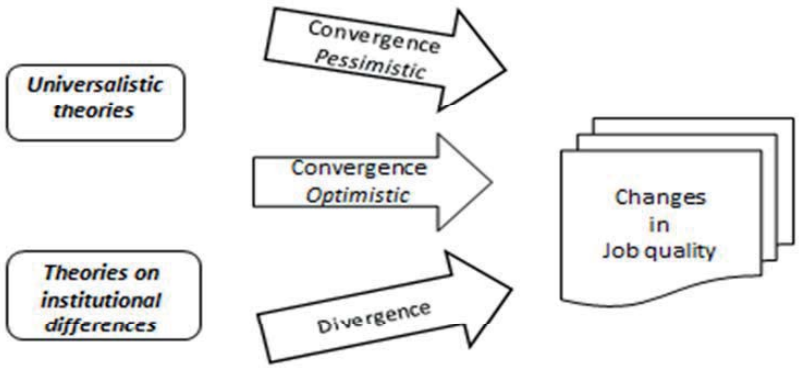
In contrast, institutional theories and comparative research literature seeks to explain how institutional, historical and cultural differences between countries lead to variation in work and employment outcomes. In other words, these theories acknowledge that while the pressures for change might be similar across the globe, outcomes diverge; the diverse set of institutional frameworks could mediate the global pressures for change and therefore act to maintain or widen differences in job quality. (see also Eurofound 2015a; Olsen et al. 2010.) These discussions suggest *divergence* between countries and regimes.

Nordic exceptionalism is explained using perspectives offered by institutional theories: the specific set of institutions and their power balance in Nordic countries should differentiate them (in terms of job quality) from the rest of Europe (e.g. Gallie 2003). The institutional theories, such as production and employment regime theories, further argue that the risks of polarisation for various employee groups, such as lower skilled workers, vary according to the regime – declining inequality in Nordic countries is suggested, especially due to regulation protecting lower skilled employees, specific development programs and the strength of organised labour. In contrast, polarisation between high and low skilled employees might occur in countries such as the UK, which has a

liberal policy orientation towards labour market regulation and where the power of labour has traditionally been weak (Gallie 2007a).

However, Nordic exceptionalism becomes challenged when taking into account the adverse effects institutions might have for gender equality in work life as well as sectoral variation of institutional strength. Recent institutional theory has developed a finer-grained understanding of sectoral variation in employment outcomes as well as institutional change through the appreciation of segmentation processes within countries (Crouch et al. 2009; Grimshaw & Lehndorff 2010): competitive pressures might vary according to the national and sectoral level, for example due to product market regulation. Also, the strength of different institutional anchors varies between sectors; for instance, the meaning of collective agreements and vocational education and training systems in creating and sustaining high levels of job quality differ for instance between the 'old' industries and 'new' services (Lloyd & Payne 2013). Looking into sectoral systems of employment provides a valuable lens through which to explore an array of contemporary challenges to national models and actors' responses to them. Aligning these distinct theoretical traditions may increase our understanding on variation in employment outcomes within countries as well as pressure to change the national employment models.

FIGURE 1 Theoretical framework: Job quality trends –Universal or divergent?



(adopted from Gallie 2007)

3.1 Universal theories on work life change

3.1.1 Up-skilling or de-skilling?

The best-known vision of change in work life is probably the rise of the new knowledge-based economy and the flexible organisation. These often very optimistic views suggest that the rise of the (knowledge-based) service economy and technological change will lead to a shift in employment, away from low-skilled and towards high-skilled occupations and better educated workers. Routine jobs are expected to be eliminated by the technological revolution and offshoring of production as a consequence of global competition (Bell 1974; Kerr et al. 1960; see also e.g., Gallie, 2007a; Handel 2005). In such knowledge economy, the production of high value, often intangible products, is carried out by highly skilled workers (e.g. Florida 2002). It is further suggested that knowledge-based work involves better training possibilities, better possibilities to use and develop various skills, and complex tasks for the employees.

However, neo-Marxists were rather pessimistic in their visions, implying that Taylorism and technological developments lead to 'degradation of work', most obviously manifested in the deskilling of jobs (Braverman 1974). Later scholars also pointed out that the transfer to 'post-industrial service society' did not inevitably mean a break from old Fordist production methods –rather, similar logics of control and separation of planning from labour as was detected in factory environments could be applied to emerging white-collar, office and service jobs (e.g. Crompton & Jones 1984) and as such may also be labelled as neo-Fordist (e.g. Julkunen 2008). Also, quite recent research has exposed how Taylorist principles of job design continue to exist (e.g. Lorenz & Valeyre 2009) and it has been pointed out that increasing service sector employment, technological advances and offshoring of production do not necessarily lead to a decrease in demand for unskilled workers. Private services constitute the fastest growing area of the economy and many of the employees within it, such as carers, cleaners, shop assistants, caterers and security guards, perform work that demands fairly low skills and relatively little education (e.g. Antón et al. 2012; Fernandez-Macias 2012).

3.1.2 Rise of the knowledge society – regain of employee autonomy?

An extensive body of theoretical literature (e.g. the so called "post-thesis") that discuss, for example, the transfer to post-industrial and post-bureaucratic society, predicts increases in task discretion afforded to employees. First of all, changes in task discretion are thought to reflect trends in the evolution of skills (Gallie, 2007b). It was argued that in the 'post-industrial society' the increasing utilisation of new technology and growing service-sector employment would have profound effects on the nature of organisation of work (Bell 1974). In this regard, a growth in demand for technical, professional and white-collar

workers or 'knowledge workers', would lead to increases in personal discretion at work. Workers in higher occupational classes, with higher levels of skills, tend to have a greater say over how to perform their duties.

According to post-Fordist theory, in contemporary work organisation, there is a move away from Taylorist strategies because direct control and deskilling are thought to generate worker dissatisfaction and employee-management conflict. The development of new management practices that emphasize employee involvement, such as high-performance management (see e.g. Appelbaum et al. 2000), learning oriented organisations (see e.g., Lorenz & Valeyre 2005) and lean production (e.g. Schouteten & Benders, 2004), would lead to more flexible, less hierarchical, networking organisations, suggesting an increase in employee autonomy and teamwork. Similarly, bureaucratic organisations are seen as incapable of meeting the challenges posed by the new economy, thus resulting in the emergence of post-bureaucracies where jobs have a higher degree of 'responsible autonomy' (Johnson et al. 2009; Kalleberg 2001).

Nevertheless, high levels of job skills do not guarantee a high level of task discretion for the employee. Autonomy is dependent on the organisation of work, especially on managerial cultures and ways of controlling the work process (Dahl et al. 2009; Green 2006). Critics have argued that these 'new' managerial strategies might also be 'neo-Fordist', actually embodying old Fordist principles and might also lead to stricter supervisory, peer and technical control and thus result in a loss of employee task discretion (Gallie et al. 2004) and increased stress (Kalleberg et al. 2009, White et al. 2003).

3.1.3 Intensification of work

Predictions about the increasing intensity of work are not new even though discussions concerning time squeeze, stress symptoms and hurriedness might appear novel. As long ago as 1974 Braverman's labour process theory recognised that a systematic trend towards the intensification of work is inherent to capitalism; that is, managers are constantly driven to find ways to make employees work longer and/or harder as a means of maximising labour input. Conversely, according to proponents of post-Fordist theory, changes such as the spread of information technology, the growth of the service sector and the rise of knowledge-based work decrease physical workload and free employees from the work pace determined by the rhythm of the production line. Moreover, new management practices should increase employee control over the entire work process, including pace and effort at work (see e.g. Handel 2005; Gallie 2007a).

As a matter of fact, in light of empirical research, these changes have resulted not in decreased work effort, but in increased ones. Several empirical studies show that employees in the EU suffer from increasing intensity of work (Burchell et al. 2009; Green & McIntosh 2001; Green 2008; Russell & McGinnity 2014). Francis Green (2004, 2008) has termed technological change 'effort biased', since technical innovations have enabled work to be redesigned in ways that

facilitate the monitoring of the labour process and better control of the flow of work to workers. Due to new surveillance techniques, workers can find themselves in what has been referred to as a modern 'panopticon'. In addition, the use of new technology produces heightened demands on workers to keep up with skill requirements, in turn increasing work pressure (Green & McIntosh 2001; Gallie 2005).

New forms of work organisation, such as high-performance and high involvement management practices, which include incentives linking effort with pay, have also been linked to the intensification of work and rising effort (Ramsay et al. 2000; Green & McIntosh 2001; Green 2004), and stress (White et al. 2003; Kalleberg et al. 2009). In addition, the shift from industrial to service work has not freed employees from external sources of work pressure. Industrial constraints - such as the pace of work being determined by the automatic speed of a machine - have been replaced by market constraints, such as direct demands from customers and patients (Parent-Thirion et al. 2007, Sutela & Lehto 2006). According to Green (2004), there are further related institutional changes that have facilitate or promote work intensification, including declining unionism and job insecurity.

Yet it has to be noted that research in the area of intensification has decreased after the early 2000s and there are not many studies analysing for instance the effect of macro-economic factors (GDP, unemployment) on work pressure, or the effect of organisational factors on work pace. However, the Eurofound report (2015) discovered that macro-economic factors such as low gross domestic product and high unemployment were associated with faster increases in work load. Moreover, Gallie & Zhou (2013, 116) found clear linear impact between the financial difficulties of the employer and work intensity: employees working in organisations experiencing financial difficulties and staff reductions during the past 5 years reported higher levels of work pressure. Also, Russell & McGinnity (2014) suggest that employees in organisations that have experienced staff cuts experience higher pressure as do employees whose companies have recently been reorganized.

Another important change that has been argued to contribute to feelings of over-work, intensification and exhaustion of employees might be the shift in the nature of households, especially the rising proportion of dual-earner households and lone parenting (Jacobs & Gerson 2001). Subjective feelings, like perceptions about rising pressure or pace at work, are difficult to separate from more general feelings about the intensification of the pace of life. Furthermore, reporting how busy one is might also be more socially acceptable than the opposite (Gershuny 2005).

3.1.4 Changing forms of employment and increasing insecurity

There is a widespread view that transformations in the world of work have had great repercussions on employment stability and job security. Standard work arrangements (full-time, indefinite contract) were the norm in many industrial nations for much of the twentieth century and formed the basis of the

framework within which labour laws, collective bargaining and social security systems developed. Macro-level changes, such as increased competition due to globalisation, greater emphasis on short-term profits, growth of the service sector and volatile consumer behaviour, have made employers seek ways of increasing flexibility (Kalleberg 2000; 2009). In turn, more flexibility has led to a growth in precarious, non-standard work and transformations in the nature of the employment relationship. Moreover, 'flexibilization' is not merely a question of an increase in non-standard contracts - it is claimed that the new economy has even made 'permanent' job contracts less stable. The institutional effects and social consequences are expressed in terms of a pervasive and growing insecurity in work life. And indeed, when employees are asked about the likelihood of losing their jobs (Green 2003; Sutela & Lehto 2014) or whether they perceive their jobs as secure (Clark 2005; Gallie 2002; Handel 2005; Olsen & al. 2010), results indicate an increase in perceived insecurity.

Yet the rise of perceived insecurity has been presented as another paradox of work life, construed as a myth or a nightmare, since many empirical studies based on objective measures such as job tenure, show that jobs are now more stable than ever before (Doogan 2001, 2005; Gallie 2002; Sutela & Lehto 2013; Paugam & Zhou 2007; Rokkanen & Uusitalo 2013). Moreover, the number of fixed-term contracts has started to decline in several countries (Gash & Inanc 2013; Fevre, 2007; Peña-Casas & Pochet 2009), including Finland (Sutela & Lehto, 2014; Soininen 2015). Critical accounts also emphasise the role of public discourse and the logic of the media in manufacturing uncertainty by affecting the experiences and perceptions on the direction of change in work life. For instance, according to a comparative report on G7-countries, news relating to job insecurity tripled from 1982 to 1997 (OECD 1997; for UK see also Green 2006, 127). According to some analysts, producing job and employment insecurity discursively has become a permanent phenomenon (see e.g. Fevre 2007; Saloniemi & Virtanen 2009).

3.2 Nordic exceptionalism and institutional theories

There are several strands of literature within the tradition of comparative political economy (of work) that seek to explain the divergent outcomes between countries in terms of employment relations, HR strategies, and quality of jobs. In this study the distinctiveness of the Nordic working life model/regime is described through theory on production regimes and on employment regimes (Gallie 2007), where Nordic countries epitomise *coordinated market economies* and *inclusive employment regime.* The most important building blocks of these categorisations are the way labor market is regulated (or not) and how also the representation of labor has institutionalised position (or not). These definitions are further explicated below as well as the mechanisms how the Nordic working life regime is expected to generate high quality of jobs. Speaking of Nordic working life regime implies that the

institutional framework in Nordic countries is thought to be specific or atypical when compared to other industrial societies. Consequently, the Nordic exceptionalism is explained in relation to the extent of coordination capacities of institutions or reliance on market mechanisms.

The two forms of argument, production regimes (Hall & Soskice 2001) and employment regimes (Gallie 2007), have been presented as central institutional frameworks to explain job quality outcomes. The Varieties of Capitalism (VoC) theory on production regimes derives from the corporatism tradition; however, the focus is mostly on the company level. The VoC theory emphasises companies as central actors in the markets and how the institutional setting in which the companies operate influence company strategies. The institutional setting broadly combines interrelations among educational and training systems, industrial relations systems, national innovation systems as well as corporate governance and the financial system (Hall & Soskice 2001). This approach differentiates between two ideal types of political economies; coordinated market economies (CMEs such as Germany or Sweden) and liberal market economies (LMEs such as the UK and Ireland). Generally, CMEs are characterised by a higher degree of state-led non-market coordination, while in LMEs, a greater role is given to competitive market arrangements. CMEs are endowed with institutions that lock in key economic actors into long-term relationships, whereas in LMEs are freer to guide their decisions and strategies on short-term self-interests. In CMEs these long-term relationships enable mutual commitments and cooperation to develop; consequently, economic actors do not often act the way neoclassical economists predict. The lack of coordination enables LMEs to react very rapidly to market signals and they aim to derive advantage from fast and radical change (Edlund & Grönlund 2008; Hall & Soskice 2001; Estevez-Abe 2005).

A very central distributor between the CMEs and LMEs is their production strategies constituted in skills structures provided by regime-specific educational and vocational training structures. In CMEs, companies tend to aim for high-quality market niches and their focus on quality and product development relies on a workforce with profound industry and product-specific knowledge, and who can work and solve problems independently. In contrast, production in LMEs is said to mainly rely on either standardised, low-wage production or on radical innovation in new industries such as software or biotechnology – strategies which mainly require general skills, readily available on the market. (Estevez-Abe et al. 2001; Hall and Soskice 2001).

Applying VoC perspectives to job quality discussions, it is assumed that institutions promoting long-term employment relationships provide possibilities for employers and employees to introduce and promote strategies leading to higher quality jobs in CMEs for instance, in terms of skills use and job complexity, employee autonomy and job security. More specifically, according to this theory, in CMEs, competitiveness is sought through an upgrading of workforce skills, while safeguarding a high employee control over

the work process. Furthermore, long-term relationships enable development of higher firm-specific skills and engage employers in higher investments these skills through training. Conversely, the LMEs are said to depend upon general skills acquired through the school system and coordinate their activities mainly in terms of hierarchies and competitive market arrangements. The use of relatively low-skilled workforce is based on tighter managerial control, resulting in the intensification of work. (e.g. Gallie 2007; Olsen et al. 2010)

While the production regime theory emphasises the centrality of the role of employers and their influence on strategies regarding various outcomes, the theory of *employment regimes* developed by Duncan Gallie (2007) seeks variation in the power resources of various actors, notably trade unions. It has to be noted that corporatist theory did recognise power resources and social protection as influential factors, concluding how such regulation provided comparative advantage to certain employers (e.g. Edlund & Grönlund 2008; Soskice 1999). In turn, the theory on employment regimes stresses the meaning of employment policies and power resources; i.e. the relative organisational capacity of employers and employees. Here, the state has an important role as a mediating actor between employers and labour. (Gallie 2007; 2011; Korpi 2006).

Employment regime theory assumes *three principal types* of employment and industrial policies that vary according to the scope of their employment rights and regulations. *An inclusive employment regime* (e.g. in Nordic countries) provides (common) employment rights as widely as possible among the working age population. The role of organised labour is highly institutionalised. *Dualist employment regimes* (e.g. Germany) concentrate on providing strong rights to the skilled, long-term, core workforce at the expense of the peripheral workforce with low-security jobs. At the other end of the continuum is the *market employment regime (e.g. UK, US)* that emphasises minimal employment regulations and relies on well-functioning market adjustment to create high employment levels. The role of labour in decision-making is restricted and institutional controls are seen as rigidities (Gallie 2007; 2011). Gallie (2007, 17) argues that these three employment systems differ in relatively systematic ways in terms of the involvement of organised labour, principles underlying employment policy and welfare protection, the role of the public sector, and the salient quality of working life programs. As such, taking into account the power of organised labour and various welfare state institutions, such as employment policies (such as full employment policies, employment rights, welfare provision), the typology becomes rather close to famous welfare state classifications (e.g. Esping Andersen 1990; see also Schröder 2013). However, welfare state research and regime classification focuses more on economic value is (re)distributed than on how it is generated. The theorisation of employment regimes includes elements from comparative welfate state analysis, but further develops and explicates the mechanism how they are likely to affect outcomes within the labor market.

The Nordic countries are considered typical examples of CMEs or the inclusive employment regime with universal employment protection and

strong unions with high union density and broad (wage) bargaining coverage (Gallie 2011). This strong and institutionalised, organised labour has the capacity to achieve multiple aims –not only to enhance wages and promote high employment levels but also to collaborate with employers, promote job quality and to develop training programs. In addition, powerful unions may be able to resist practices that may be deleterious to job quality, such as standardisation and excessive monitoring (Gallie 2007a; see also Holman 2013a; 2013b).

Within this institutional framework, the power of organised labour and various state policies are expected to balance the power relations and affect the quality of jobs. Employment protection legislation places restrictions on employers for firing workers (e.g. Estevez-Abe et al. 2001), while welfare state provisions are expected to shape insecurity experienced by employees (e.g. Korpi 2006). Unemployment benefits in particular, should buffer the negative economic consequences of a job loss as well as buffer fears concerning job loss (e.g. Sjöberg 2010). Moreso, active labour market policies in inclusive regimes are expected to help regain employment, thus reducing insecurity. This occurs in an atmosphere where the large public sector offers both employment and work-family policies to support employment.

Further the importance of the specific work life development programs developed in the Nordic countries since the 1970s must be recognised. The development programs were, and still are, driven by national policies, unions and employers, and aimed to improve learning possibilities and the organisation of work, including both the physical and the psychological conditions of work. These programs have traditionally placed strong emphasis on enriching the content of tasks, increasing employee discretion over how to carry out their jobs, and facilitating greater employee decision-making in organisational matters. (Elvander 2002; Gallie 2003; Gustavsen 2007). The importance as well as legitimicy of development programs is not only to increase productivity and quality of jobs within individual organisations; rather it is important that the development programs create broad based learning effects which are diffused through networks and change work life in long term (Alasoini 2016a).

Together, these above described institutional factors are expected to interact, creating fertile ground for high quality if work life. Moreover, these structures are ought to create cultures of trust, mutual respect and negotiation between labour market parties and further contribute to quality of jobs.

Indeed, in empirical studies, Nordic countries score high in terms of job quality (Davoine et al. 2008; Esser & Olsen 2012; Eurofound 2015; Gallie 2003; Gallie et al. 2013; Green et al. 2013; Holman 2013a; 2013b; Johnson et al. 2009; Kerkhofs et al. 2008; Leschke et al. 2008; Leschke et al. 2012; Lorenz & Valeyre 2005; Parent-Thirion et al. 2007; Tangian 2007; Wallace et al. 2007). More specifically, workers in Nordic countries report a higher quality of work tasks and better opportunities for participation in decision-making compared with other European countries (Gallie 2003; Lopes et al. 2015). Moreover, Nordic

countries seem to score high in terms of autonomy (Drobnic et al. 2010; Edlund & Grönlund 2010; Esser & Olsen 2012; Gallie 2007b; Gallie & Zhou 2013; Lopes et al. 2013) and in self-development opportunities and learning at work (Green 2006; Parent-Thirion et al. 2007). Nordic countries have also been distinctive in the high prevalence of new forms of work organisation (Lorenz and Valeyre, 2005) and 'flexicurity' systems (Tangian 2005; Vermeylen 2006). Nordic countries have the smallest shares of insecure employees (Gash & Inanc 2013; Erlinghagen 2008), yet controversially, fixed-term contracts are rather common (Parent-Thirion et al. 2007; Gash & Inanc 2013) and employees in Nordic countries report high levels of intensity (Drobnić et al. 2010; Gallie & Zhou 2013; Greenan et al. 2013), regarded as factor that negatively affects well-being. Yet increasing amount of research points out that when looking at how these various features are combined in a job, Nordic countries show the highest proportions of good quality jobs, combining high intensity with high autonomy (Parent-Thirion & al. 2007; Holman 2013a; Gallie & Zhou 2013).

In contrast to coordinated and inclusive economies represented by Nordic countries, the *liberal, market-driven employment regime* is characterised by little state and labour involvement, leaving the employers with more leeway to implement policies. Traditionally, the sharpest distinction is indeed drawn between 'coordinated' Nordic and 'liberal' Britain (Gallie 2007a). The level of labour organisation is low in the liberal regime and labour organisations tend to have minor involvement in decision-making within organisations or government. In addition, low levels of employment regulations lead to a relatively flexible labour market and assume low mutual engagement between employers and employees, in terms of training investments and job continuity (Holman 2013a). As also argued in VoC theory, organisations may be expected to accommodate their strategies to lower employee skill levels, which restricts the design of complex jobs and new forms of work organisation (e.g. Estevez-Abe 2001; Edlund & Grönlund 2008). Consequently, LMEs are expected to be characterised by limited employee decision-making in work processes, tighter managerial control, and a higher intensity of work.

Although the UK and Nordic countries are seen to characterise opposite ends of a theoretical continuum of regulatory institutional framework and employer strategies, the UK does not uniformly represent an empirical opposite of the Nordic success. Rather, the positioning of the UK (and Ireland) in European comparisons has varied greatly depending on the perspective of the study, time frame as well as chosen indicators. Some studies, mostly based on job quality indexes or similar approaches, have pointed out how the UK is actually rather close to the Nordic countries (Ehrel & al. 2008; Leschke & al. 2008; Peña-Casas 2013). Others place the UK closer to the European average (Esser & Olsen 2012; Greenan et al. 2013; Leschke et al. 2012) whereas some report the quality of jobs in liberal countries such as UK as being among the lowest (Holman 2013b).

Continental countries, such as Germany, were categorised into the CMEs together with Nordic countries, (Hall & Soskice 2001). Yet this postulated

similarity of the Nordic and Continental countries has faced criticism too. Gallie (2007a) argues that the theoretical account provided in the production regime theory underestimates the importance of differences in the employment relationship resulting from the policy orientation and the institutional structure of industrial relations. Consequently, he distinguishes dualist market economies, such as Germany, from the Nordic countries (Gallie 2007; 2011). In welfare regimes, continental countries like Germany, France, and Austria form an independent 'corporatist' regime. The Nordic and Continental coordinated societies were seen as distinct, as the role of organised labour in Continental countries may be described as consultative within organisations and the influence is partly dependent on the party in government (e.g. Holman 2013a). The Dualistic model, which mainly concentrates on representing the interests of the core workforce (Gallie 2007) and policies to support families instead of overall employment (Hennig & al. 2012), may result in polarised outcomes and consequently, depress the overall levels of job quality. In the enlarged EU, Continental countries often represent the job quality 'average' or alternatively, rank in an intermediate-to-high position in terms of for instance, socio-economic security, training, autonomy and other working conditions (EC 2008; Holman 2013a; Peña-Casas 2013).

Some European comparisons aimed at placing all EU countries, including those in Southern and Eastern Europe, on a regime map, and to evaluate the level and direction of job quality respectively. Although placing most of the European countries on the continuum between the ideal types of coordinated and liberal countries is somewhat unclear, there have been endeavours to describe their main features. Hall and Soskice (2001, 21) introduced a tentative concept of a 'Mediterranean' type of capitalism – marked by 'a large agrarian sector and recent histories of extensive state intervention that have left them with specific kinds of capacities for non-market coordination in the sphere of corporate finance but more liberal arrangements in the sphere of labour relations'. Southern countries are characterised by weak vocational training and early school leavers and medium levels of union centralisation (Davoine et al. 2008). 'Mediterranean' countries are distinguished by 'the very active role played by the state and the weak and rather militant unions.' Consequently, coordination in these countries, it is suggested, is achieved through national legislation, rather than through agreements between labour and management' (Edlund & Grönlund 2008). The meaning of labour legislation is visible, for instance, in comparisons that show relatively high levels of non-standard contracts in Southern European countries (Allmendinger et al. 2013; Hipp et al. 2015), which are said to be due to strong legal employment protection. Although they do have high levels of protection for core employees (Davoine et al. 2008), job quality appears lower than in other old EU member states. In empirical studies, Southern European countries usually display lower levels of job quality compared to Liberal and Continental countries, representing low-to-intermediate scores in terms of job security, skills use at work and access to training (EC 2008; Ehrel & al. 2008; Holman 2013a; Leschke & al. 2008; Peña-

Casas 2013). Additionally, employees have fewer opportunities for skill development or to influence their daily tasks, and have lower job satisfaction and work–life balance (EC 2008; Peña-Casas and Pochet 2009).

The allocation of the new member states in Central and Eastern Europe within 'the regime schema' is also troublesome (also often named as transitional states, see e.g. Holman 2013a). First, studies show that there are differences between the situations of the old and new member states, particularly in terms of economic and social development and the structure of their economies, i.e. sizes of agriculture and industry sectors. There are also significant differences between the new member states that complicate seeing them within a coherent regime (for a short review see Peña-Casas 2013). For Edlund and Grönlund (2008), 'most of these appear to be liberal, with low tax levels and small public sectors'. Union density is also relatively low and most bargaining is carried out at the company level (Gallie 2011). In empirical comparisons, Eastern European countries usually represent low levels of job quality, featured as low socio-economic security, low in possibilities for learning and personal discretion and risky working conditions such as high exposure to health risks (Peña-Casas 2013; Holman 2013 a).

3.3 Class polarization risks: universal or differentiated by regime type?

As with regards to general theories on work life change, distinction in terms of polarising tendencies in work life could be made according to universal and institutional arguments. Universal theories assume the forces of stratification in the labour markets would result in similar polarising developments irrespective of the context, whereas institutional perspectives propose polarisation risks may differ according the context (e.g. Gallie et al. 2007; Green et al. 2013). Polarisation may broadly be understood as the growing gap between different groups of employees in their job-related outcomes; in other words growing inequality between low and high skilled or low and high educated workers on various types of contracts, including permanent and temporary contracts, and part-time and full-time contracts (see e.g. Eurofound 2015; Gallie et al. 2007; 2013; Green et al. 2013). In the leading study the focus is restricted class polarization risks in terms of quality of jobs.

The factors that were presented as drivers of change in the introduction and with regards to the convergence in job quality may be seen as drivers of growing inequality in job quality (e.g. Kalleberg 2011). Specifically, lower skilled workers suffer from the rise of the knowledge society and computerisation, as rising skill requirements make lower skilled work more vulnerable, and as lower skilled would assumingly face difficulties in assimilating new technology. High levels of technology require high levels of skills but the effect on quality of jobs is more complex: while some jobs improve,

others may become more routinized and demand lower levels of skills (Green 2006). Tightening international competition, restructuration of the economy and offshoring of production has created pressures for reduction of production costs and higher flexibility in production processes and consequently, made many jobs and professions vulnerable to dumping of working conditions in Western countries (e.g. Appelbaum et al. 2003). The implementation of neoliberal policies and weakening power of unions are likely to hit the conditions of low skilled work as it is mainly the lower skilled, lower paying jobs that the regulations bite. Deregulation and declining unionism have also made it easier to create many low waged, "bad" jobs in countries such as the US and UK (e.g. Kalleberg 2011; 2012; Appelbaum & Madrick 2012) and in times of economic hardship, it is mainly low skilled employees that face the steep degradation in job quality (e.g. Stier 2015; see also Gallie et al. 2013).

In contrast, highly skilled workers may be protected from various pressures posed by technology and globalisation. It is known that today employment growth is highest in high skilled, high paying occupations, which are usually also characterised by high job quality (e.g. Fernandez-Macias et al. 2012), and evaluated as least threatened by new technology due to their high cognitive requirements and creativity (e.g. Eurofound 2014). Careers of highly skilled worker are also more stable (e.g. Soininen 2015) and their skills easily transferable in case of dismissal (Edlund & Grönlund 2008). Moreover, autonomy is closely related to skills and a fundamental notion is that tasks involving complex skills are difficult to monitor and sanction. Therefore, possibilities for further skills development and the level of autonomy is considerably higher for highly skilled employees than among unskilled workers (e.g. Edlund & Grönlund 2010; Gallie 2007). Research literature has detected polarisation in terms of job quality (see e.g. Green et al. 2013; Feldsted, Gallie & Green 2015 eds.): especially between high and low skilled in the UK in terms of possibilities to use and develop skills at work (Feldsted *et al*. 2007) and task discretion afforded to employees (Gallie 2007b; Gallie & Zhou 2013; Feldsted *et al*. 2007).

In discussions concerning increasing inequality in work life, the trend is often generalised. Yet it is notable that for instance the results mentioned above mainly concern the UK and US. Whether increasing inequality in job quality is confined to liberal countries has been a question left open. Research enlightened by comparative and institutional perspectives has theorised – and detected – varying developments regarding inequality across countries. In contrast to universal theories, institutional theories presented in the previous chapter, such as production and employment regime theories, discuss not only job quality trends at the country level but also how polarisation risks differ depending on the institutional contexts.

As both the production regime theory (Hall & Soskice 2001) and the theory on employment regimes (Gallie 2007a) assume diverging job quality outcomes for high and low skilled workers, the risk for class polarisation is described as high in liberal countries, whereas the risk is perceived as low in

coordinated and inclusive regimes such as in Nordic countries. In coordinated Nordic countries, the risks of polarisation between high- and low-skilled workers would be minor due to the employer strategies and institutional factors protecting the lower skilled in particular (Gallie 2007a). In the Nordic type of CME, companies are encouraged (by institutional regulation, but also by their own high quality product strategies) to have long-term perspectives in terms of financing, investment and relationships with their employees. The specialised skills required for the production of 'complex diversified quality products' (and services) in a coordinated economy would be supported and needed across the workforce, resulting in a higher quality of work life with higher prevalence of new forms of work organisation, higher autonomy and better decision-making responsibilities also among the low skilled.

Quite the contrary, in the liberal market economies there is lack of coordinating structures and the two main options for competitive advantage and work organisations are to rely either on radical innovation or traditional Fordist systems of standardised mass production. Consequently, we could expect the organisations to compete either with low cost rather than quality, resulting in jobs requiring little education, or in innovative high quality jobs relying on high level of skills. Thus, LMEs may face a polarisation of skills use, work autonomy and stability (Soskice 1999; Gallie 2007a; 2007c). Consequently, although LMEs were described as societies based on low-skill equilibrium in early formulations of the theory, more recent discussions characterise them in terms of a highly polarised skill structure (Gallie 2007c).

Similar outcomes are predicted according to employment regime theories, which also take into account power relations between the employers and employees, and the state as a mediator: liberal countries pose higher risk for polarisation whereas Nordic countries representing *inclusive employment system* aimed at protecting the rights of workers in general are assumed to lower significantly the risk for class polarization in job quality (see e.g. Gallie 2007a; Korpi 2006). More in detail, the coordinating strength of organised labour and the influence it exerts at the national, sectoral and workplace levels provide an important defence against employer prerogative. It has been argued that in Nordic countries, the degree of inclusiveness is high, as the formal coordination mechanisms to influence the wage, benefit and working conditions negotiated by workers in industries and occupations with strong bargaining power are extended to industries and occupations with less bargaining power, raising pay, benefits and other working conditions the most for workers at the bottom, and providing protection for non-unionised workplaces. (see also e.g. Appelbaum et al. 2010.)

Furthermore, the role of the state in creating an inclusive employment system and raising standards at the bottom is recognised as important. According to Gallie (2002), in the late 1980s and 1990s, nation states developed very different employment policies to address the issues concerning quality of work life. The 'neo-liberal' path, followed in the UK, favoured increasing wage differentials and reducing collective bargaining controls on employers. Quite

the contrary, the 'Scandinavian' path (policies together with specific work life development programs) involved efforts to improve the quality of work of the low skilled and to provide more effective ladders for skills enhancement. These mechanisms act as key factors in narrowing down differences with regards to job quality outcomes, as represented by measures of polarisation or inequalities.

Empirical research based on comparative methodologies has supported the hypothesis on differentiated polarisation risks across countries and the effect of institutions on comparatively high job quality of the lower skilled in Nordic countries. Gallie and colleagues (2007) reported differences between countries and found support for the production and employment regime hypothesis whereby the risk for job quality polarisation would be rather small in Sweden, which represents a coordinated Nordic country – especially in relation to wages (Tåhlin 2007), task discretion (Gallie 2007b) and job security (Paugam & Zhou 2007). Researchers Esser and Olsen (2012) confirm the effect of institutions on achieving greater socio-economic equality in job quality. Relying on multilevel models, they demonstrate how job autonomy among employees with lower skills and educational levels is higher in countries with stronger unionisation and a more specific skills profile. Also, Edlund & Grönlund (2010) support this view with their findings. Although their results suggest class differences in autonomy are no greater in the UK than in Sweden or Denmark, Nordic countries are characterised by high strength of organised labour and unskilled manual workers with comparatively high levels of autonomy - in fact, higher than in the service sector in the UK.

Also, more recent research has provided further support for the employment regimes' hypothesis on low class inequality: further study of Gallie and his colleagues (2013), which concentrates on the period of economic crisis between 2004-2010, found no evidence of class polarisation in Nordic countries with regards to training, task discretion and insecurity. In addition, class inequality in training participation declined in Nordic countries as Dieckhoff (2013) observed a reduction especially in the training participation of highly educated (those with tertiary education) while the lower educated experienced a clear growth in training. Similarly, with regard to task discretion, class differentials remained stable in Nordic countries and increased only in liberal countries as routine semi- and non-skilled employees saw their relative position sharply deteriorate (Gallie & Zhou 2013). Correspondingly, Lopes et al. (2013) found, based on a cross-sectional dataset, that employees in Nordic countries display far fewer differences in terms of work autonomy across workers in various skill levels than other welfare regimes (for trends see Lopes et al. 2014). In terms of intensification of work, polarisation in high strain jobs in liberal countries were reported but not in Nordic regimes (Gallie & Zhou 2013).

The study of Green et al. (2013) took into account trends between 1995-2010, and included a scrutiny of inequality in EU15 countries in terms of skills use and discretion, working time quality, physical work environment and work intensity: inequality was the lowest in Nordic countries compared with other EU15 countries. Yet it has to be noted that the analysis of Green et al. (2013)

comprises broader groups of workers (age, educational levels, type of job contracts in addition to occupational position and gender), whereas all other mentioned research studied these individual employee factors one by one, making comparisons impossible.

Despite providing important insights into job quality trends according to class/occupational levels and providing support for the hypothesis on varying polarisation risks across countries/regimes, by critically evaluating the research setting important limitations are revealed: many of the studies are restricted to cross-sectional data or rather short time spans due to a lack of available data. Thus, the studies provide only limited possibilities to make conclusions on long-term polarising developments or other occupational trends. Consequently, from earlier research it remains unclear from what kind of trends low class polarisation is a result of and it seems possible that the institutional frameworks in Nordic countries have capacities to protect the quality of jobs of the lower skilled. But what about the middle class and the higher skilled? Are their jobs more protected from the pressures of globalisation and technological change?

Regarding long-term trends, it has been found that training and discretion at work (Gallie et al. 2004; Feldsted et al. 2007) have declined in the UK in all occupational groups, but most for professional workers over time (Green et al. 2016a; et al. 2016b), results which do not exactly correspond to polarisation hypothesis where the highly educated are expected to be protected from degradation of job quality or even do increasingly better.

Based on the institutional theories and earlier empirical evidence, it would be expected that the polarisation tendencies, especially the degradation of the job quality of the lower skilled, would be minor in Nordic countries, including Finland. Yet it is viable to question trends in light of universal theories concerning work life changes that are risky especially those employees with less education and/or in manual occupations.

3.4 Gender and job quality: the adverse effects of institutions

The Nordic work life model contains a strong narrative achieving gender equality. Furthermore, the Nordic welfare state (the social democratic regime) has been characterised as women-friendly as it has supported women's access to paid employment by decommodification of care and provided jobs for women in the public sector (e.g. Anttonen & Sipilä 2000, Hernes 1987, Julkunen 1992).

The Nordic dual earner model differs from the conservative, 'modified/weak male breadwinner' model (represented for instance by Germany) and liberal 'male breadwinner' models (e.g. the UK) to the extent that the institutional structure invokes women into the labour market and paid employment. In conservative and liberal countries, care provision is more closely tied to family and their capacities to organise care or purchase it from the market. Compared to the Nordic model, women's participation in the

labour market in conservative and liberal regimes is limited due to low public support (Anttonen & Sipilä 2000; Julkunen 1992; Lewis 1992).

Indeed, in many respects, women in Nordic countries have gained firm ground in the labour market. For instance in Finland, women have not only reached, but exceeded men in terms of educational attainment and employment rates (Sutela & Lehto 2014, 17-19). In Finland women also mostly work full-time and part-time work is less common than in other Nordic countries and in most European countries (Anxo et al. 2006, 40; Esping-Andersen 2009; Haataja et al. 2011).

Thus, alongside feminist scholars influenced by Sen's (1992) and Nussbaum's (2000) theories on capabilities, it is possible to argue that it is not only labour force participation that differentiates women in terms of capabilities, but also the quality of employment that matter. Although being inside or outside the labour force may be considered a major factor, it has been discussed how welfare institutions might affect the agency, capabilities and employment outcomes of females in unpredictable ways.

Feminist scholars within the tradition of comparative political economy have engaged in "gendering the VoC perspective". Scholars have discussed how emphasis put on skill formation systems and employer strategies could have different implications for men and women on the labour market in distinct regimes. Margarita Estévez-Abe (2005) argues that compared to men, women in coordinated economies, such as Finland, would be disadvantaged in the labour market. The argument is that an emphasis on specific skills would lead to the discrimination of women, especially in private sector jobs, as employers would be reluctant to hire and invest in the training of employees who would be likely to have career interruptions for maternity leave or work shorter hours due to the family responsibilities. Moreover, strong employment protection as well as the generous family benefit policies characteristic of the Nordic countries tend to intensify employer discrimination against women. The strong employment protection constrains employers' possibilities to lay-off, while employers also have difficulty in finding temporary replacements for employees on family leaves, due to the specificity of the skills required. Hence, extended maternity leaves are seen as especially damaging to women's employment in economies reliant on specific skills (see also Mandel & Shalev 2009).

This controversial phenomenon has been identified as the "welfare state paradox" (Mandel & Semyonov 2006) because the social democratic type of work-family policies considered female-friendly are also considered to have harmful side-effects. Although generous welfare state policies facilitate womens access to the labour force by creating public sector jobs and by providing employment protection and childcare, they do not facilitate entry to the private sector and high-quality, high-skills positions. In consequence, the labour markets could be distinguished into occupations and sectors characterised by high levels of female employment and those in which women struggle to attain good quality jobs. In addition, extensive work-family policies offered by the generous Nordic welfare states are most often (explicitly or implicitly) targeted

towards women, thus reinforcing the cultural image of women as mothers and primary caregivers and damaging the image of mothers as workers (e.g. Ellingsaeter 2013), which increases the gap between men and women in work life.

The welfare state paradox hypothesis on women's higher disadvantage in occupational achievements in Nordic countries has gained support in comparative studies. Nordic countries have low representation of women in lucrative managerial positions and a high concentration of women in female-typed occupations (Dämmrich & Blossfeld 2016; Evertsson et al. 2009; Mandel & Semyonov 2006; Yaish & Stier 2009). Additionally, with regards to job quality indicators, including skills, autonomy and job security, the gender gap was found to be most pronounced in Sweden when compared to other political economies representing dualistic (Germany) and liberal models (UK) (Gallie et al. 2007). In the study by Peter Mühlau (2011), women in gender egalitarian societies were more disadvantaged in work life in terms of training, job autonomy, participation and work pressures but no relationship was found with regard to job complexity nor advancement. Although Mühlau does not explicitly report on country differences in gender egalitarianism, in the light of previous research, egalitarian attitudes are highest among Nordic countries (see e.g. Nordenmark 2004; Leschke & Jepsen 2014).

Furthermore, the theory on welfare state paradox has been developed to take into account the interaction of gender and class: the institutional frame provided by the Nordic welfare state is supposed to have particularly detrimental implications for highly educated women in higher skilled occupations (Estévez-Abe 2009; Mandel & Shalev 2009; Mandel 2012). Positions involving high training costs can be assumed to be mostly given to stable and productive workers, meaning that highly skilled women would be disadvantaged in competing for good quality jobs. Furthermore, employers should have less of a reason to discriminate against women when considering them for low-skilled jobs as the costs for replacing and training the employee are not as high (Estevez-Abe 2005; Mandel 2012). Consequently, it is expected that in economies reliant on specific skills but with generous family policy (such as the Nordic countries), the gender gap in terms of job quality would be higher among the highly-skilled and less pronounced among the low-skilled workers. In contrast, women in lower echelon jobs would benefit from the regulations and strength of organised labour, as it is mainly in lower skilled jobs that the regulations make a difference. For instance long maternity leaves allow mothers to preserve their attachment to work.

Also, the hypothesis on generous welfare state supports in Nordic countries impeding the occupational achievements especially of highly skilled, highly educated women has gained support: the gender wage gap was found to be higher between highly educated men and women in Sweden as compared to the US (Evertsson et al. 2009). Similarly, Mandel (2012) found in her comparative study, how in Scandinavian countries the gender wage gaps are very narrow in lower socio-economic groups but wider in higher socio-

economic groups (see also Korpi, Ferranini & Englund 2013). These results supports the view presented by David Soskice (2005) that lower skilled workers benefit from encompassing legal and social protection whereas in higher skilled groups women's career achievements are indirectly inhibited by welfare state structures. Comparative research has pointed out that class equality is sometimes achieved at the expense of gender equality (see e.g. Cooke 2011) suggesting that policies that have been able to contract class inequality from growing, has compromised gender equality.

The gendered VoC framework has been criticised for overemphasising the employers' tendencies to discriminate on women in Nordic countries as well as for downplaying the role of the state and organised labour in enabling women's continuous and high quality employment (e.g. Gallie 2007a; Rubery 2009). Contrary to the VoC's assumptions, according to the employment regime framework, it is possible to argue that in fact, it would be the dualist employment regimes that tend to reinforce the gender divide as women are less likely to be part of the core workforce (Gallie 2007a). In other words, it is in the dualistic regime (in conservative CME's) that institutional frameworks and policies push women to lower quality jobs or out of employment, as the state provides long leaves, only limited childcare and short schooldays.

Critics have also pointed out employment protection as well as strong unions also benefit the careers of females (not only those of men) and their quality of employment, preventing them from becoming labour market outsiders (Rubery 2011). In addition, the Nordic countries actually aid in overcoming the problems of career interruptions and consequent skill deterioration: By providing institutional support for families (and employers) and socialising the costs of both leaves and childcare, the Nordic system actually reduces the economic rationality of employer discrimination of women (e.g. Rubery 2009).

It should be further pointed out that the earlier results concluding the welfare state paradox have not been evaluated closely enough: for instance, the theory on welfare state paradox and much of the support is gained, has been based on rather old- and thus outdated data from early 1990's, even in the more recent publications (e.g. Mandel 2012). Furthermore, there have been claims that welfare state regimes capture country variation in women disadvantage (in holding supervisory positions) much better than single macro indicator (Dämmrich & Blossfeld 2016) thus the results has been interpreted as highlighting the imporatance of the taking into account the overall ´welfare state package' in which (women's) labor market participation is embedded when evaluating the employment outcomes.

However, closer reading of earlier results reveals how different policy instruments might have different effects on women's careers. Mandel and Semyonov (2005) found that publicly funded childcare and public sector employment had no significant effect on the gender earnings gap. In a similar vein, in 2006 Mandel and Semyonov found that public investment in childcare and the size of the public sector had only small negative effects on women's

career attainment, measured as women's share in managerial positions; in contrast the length of absence from work life had more effect on women's likelihood in gaining a managerial position. In addition, more recent comparative studies demonstrate how affordable, good quality, public child care in fact facilitate (not hinder) women's continuous employment (Dieckhoff et al. 2015; Steiber & Haas 2012). In other words, having a child does not necessarily equal a (prolonged) withdrawal from the labour force and consequent skill deterioration, if affordable, reliable childcare is available. It has been shown how among family friendly policies, publicly supported and provided childcare does not seem to have negative employment consequences (for an overview see Gupta et al. 2008; Hegewisch & Gornick 2012; see also Thevenon 2013). However, actual interruptions and adaptations, mainly part-time work, explain gender gap in authority in many Nordic countries (e.g. Grönlund & al 2017). It is also known that in Nordic countries, women of different classes use different policies: lower educated and skilled women are more likely to take longer care leaves (e.g. Haataja & Juutilainen 2014). In addition, from the employers' perspective, during the legally protected parental leaves, employers also retain their access to their skilled and trained employees.

In line with critique targeted towards the gendered VoC theory, it has been argued, based on empirical research, that the welfare state paradox of disadvantage for women might be overstated. As presented in the earlier chapter, Edlund and Grönlund (2008) questioned the endurance of the VoC argumentation and their results may also be interpreted from a gender perspective: it is possible to ask whether strict employment protection combined with firm-specific skills actually leads into discrimination of women. They argue that although employees in Nordic countries possess considerable firm-specific skills measured in terms of tenure and training time (i.e. time required to learn to do the job well), employers do not seem to experience any greater difficulties in replacing their employees, when compared to employers in other regimes. In addition, they support their critique with the finding on gender and class differences in tenure in Nordic countries being negligible. According to Webb (2010), Swedish women have not demonstrated greater difficulties in accessing higher occupational positions when compared to the UK. Also Korpi et al. (2013) found that country differences in women's chances to enter the top wage quintiles and access to well-paid managerial positions appear to be small.

A second line of critique pointed towards gendered VoC theory could be drawn from the general critique concerning production regime theory or theories on comparative political economy more broadly – for not being able to recognise pressures for change (Bosch et al. 2007; Hauptmeier & Vidal 2014; see also Rubery 2009). It is noteworthy that these theoretical discussions do not take into account changing gender relations in the wider society, which potentially affect women's participation and achievements in the labour market.

Yet there are several trends in society that could be expected to reduce gender differences in work life over time. For instance, institutional efforts

towards gender mainstreaming and with regard to employment policies (e.g. Rubery 2002; Fagan et al. 2005) and by creating family policies targeted explicitly to fathers (Duvander & Johansson 2012; Lammi-Taskula et al. 2011) are deliberate endeavours towards passaging, although slowly, towards greater gender equality (in work life). Research has also detected changing values towards gender equity (e.g. Edlund & Öun 2016; Scott 2006) as well as changing behaviour: highly educated men in particular, have increased their participation in household work, childcare and time spent with children in general and consequently the gender gap in time use is smallest among the highly educated (for Finland: Pääkkönen & Hanifi 2011). It was also found that fathers tend to use a larger share of parental leave in families with more educated mothers (for Sweden Sundström & Dufvander 2002; for Finland Saarikallio-Torp, M. & Haataja A. 2016). However, there is variation between countries representing different employment and welfare regimes: Although it is known that higher educated women across countries have stronger labour force attachment, gender gap in both in household work and paid working time is low among the highly educated men and women in Sweden compared to the US (e.g. Evertsson & al. 2009).

Consequently, if we acknowledge the role of the state and organised labour in Nordic countries as well as the changes in the structures surrounding the labour markets, such as women's increasing educational attainment, increasing labour force participation, and changing gender norms and behaviour both in paid and unpaid labour, we could expect at least some decline in gender inequality also in terms of job quality, especially among the highly skilled. Yet how the institutional framework shapes gendered and classed employment outcomes remains unclear and more knowledge is needed on how class and gender interact in Nordic labour markets.

3.5 Strength of institutional anchors and sectoral variation in job quality

Institutional theories have advanced the knowledge of how institutions structure and affect employment relations and job quality outcomes. In addition, they seek explaining how certain socio-economic outcomes are shaped by country models of welfare states and industrial relations. As such, theories have aided in developing better understanding of national contexts, especially for the purposes of cross-national comparisons.

Critical accounts have pointed out how national institutions provide a basic source of variation in employment outcomes but do not necessarily explain variation within countries, and for depicting stability and not being able to recognize change. (see e.g. Grimshaw & Lehndorff 2010, Hauptmeier & Vidal 2014.) Institutional theories such as varieties of capitalism are creating an 'impression of extreme coherence' (Crouch et al. 2009) which does not

necessarily hold true. Macro-level studies based on representative samples of working populations have been unable to look within specific types of jobs as well to assess in more detail economic and managerial influences on job quality (e.g. Sengupta & al. 2009). The theoretical models and the links between the national institutions and job quality are claimed to draw from a narrow segment of research based in manufacturing industries (e.g. Carré & Tilly 2012; Lloyd & Payne 2013). These assumptions might be increasingly outdated as manufacturing represents the declining sector whereas the most rapidly emerging jobs are created in the service sector (Eurofound 2013; Fernandez-Macias et al. 2012 book). Yet in many areas of services, especially in the rapidly emerging new industries such as media, health, leisure and fitness, and other personal services, institutions such as unions present industry-wide collective bargaining and where a strong system of nationally coordinated vocational education and training systems are limited or absent (e.g. Bosch & Lehndorff 2005; Lloyd & Payne 2013).

Grimshaw & Lehndorff (2010) propose that job quality is sustained and strengthened by key 'institutional anchors' whose presence and strength varies not only by country but also by sector. First of all, the strength of organised labour and collective (wage) agreements are key variables in characterisations of employment regimes. However, the bargaining power of the employees varies between sectors, industries and occupations. Secondly, where a skills formation system gives employees greater expertise, professionalism and stronger occupational identity grown through vocational education and the training system, employees are more likely to build resistance to modifications of work organisation that threaten to undermine the control they can exercise over their jobs and less willing to be subjected to control and degradation (Gallie 2007d, 216). Thirdly, the role of the state in creating an inclusive labour market and a social safety net is an important anchor. Welfare states shape (female) labour force participation, pay and working conditions (in public sector jobs) as well as (re)distribution and the general (feelings of) social security (Appelbaum 2010; Grimshaw & Lehndorff 2010; Meagher, Szebehely & Mears 2015).

Much of the earlier empirical research comparing specific sectors or jobs between countries, reinforce the predictions of institutional theory on national differences: even when taking the 'bad jobs' or 'low-wage jobs' as an example, such as call centre jobs (Batt & al. 2009; Doellgast 2010; Holman 2013b) or cashiers (Askenazy & al. 2012), institutions have better capacities to defend the quality of jobs in coordinated and inclusive employment systems (such as Nordic countries) compared to liberal environments. Askenazy et al. (2012) focused on cashiers in the food retail sector in France and in the UK, and concluded that national employment systems interacted with sector-specific pressures, from which they created a framework labelled as 'national-sectoral models': Regardless of the national model, managerial imperatives including tight control of costs, particularly labour costs, and the need for flexible labour were similar. However, the outcomes differentiated in terms of pay (due to

labour legislation, such as minimum wage) and working conditions (due to product market regulation, such as restrictions on opening hours).

These comparative studies that concentrate on certain sectors and jobs, in addition to highlighting the differences between countries and persistence of the meaning of institutions in creating varying outcomes, also have an important message on recognising similarities and changes: studies have shown how some dimensions of employment relationships are more and others less susceptible to external market influences and pressures of globalisation (e.g. Batt et al. 2009; Berrebi-Hoffman et al. 2010; Grimshaw & Lehndorff 2010). Concentrating on call centre work, Batt, Holman & Holtgrewe (2009) showed how widespread global diffusion and organisational learning were visible in usages of technology, the ways work was organised and standardised, and in centres specialised by products or service offerings. They also found, contrary to the expectations, how in coordinated economies, firms made greater use of part-time and contingent workers as a strategy to deal with competition and employment protection legislation or to avoid union contracts. Another extensive comparative study conducted by Katz & Darbishire (2000) looking into telecommunications and auto industries in six countries, found that although national institutions were found to play a role in shaping the mix of different work practices and the quality of labour-employee outcomes, their research demonstrated how there is growing diversity of work practices and employment patterns *within* countries and within sectors and between organisations making distinctive country patterns of employment and work practices less evident.

In fact, an increasing amount of case studies from different sectors have highlighted how firms may be less bound by national institutions than regime theories usually assume (e.g. Appelbaum 2010, Crouch et al. 2009; Grimshaw & Lehndorff 2010; Haidinger et al. 2014; Kirov & Ramioul 2014; Lloyd & Payne 2013; Lillie et al. 2014). For instance, Vanselow et al. (2010) compares the work of hotel room attendants across six countries representing very different employment systems, and found little differences in job contents or the ways the work was organised. In a similar token, Lloyd and Payne (2013) in their comparative research on the fitness industry, found no differences in managerial practices and the organisation of work of fitness instructors working in gyms based in the UK and Norway. They argue that the strength of 'old' institutions is limited or absent in areas of rapidly emerging new services, and that if there is national employment 'logics', they have been overwhelmed by specific industry dynamics.

It is not only a question of how the strength of institutional anchors vary between sectors: Companies may (deliberately) build their strategies around circumventing regulations and collective agreements. Eileen Appelbaum (2010) summarises the results of a comparative research project on low-wage work (Gautié & Schmitt 2010) in six countries in five sectors of employment – call centres, food processing, hospitals, hotels and retail trade – concluding: 'Efforts to reduce wages have led some employers to take advantage of various

loopholes that enable them to escape the institutions and social norms that govern the employment relationship in their countries, leading to what one observer has come to call "*varieties of institutional avoidance*", in a play on the term 'varieties of capitalism'.

An increasing amount of case studies in different sectors, such as in construction (Lillie et al. 2014), parcel delivery, IT services (Haidinger et al. 2014), cleaning (Kirov & Ramioul 2014, Vanselow et al. 2010) and call centres in various service industries (e.g. banking, insurance, airlines, telecommunications) (e.g. Batt, Holman & Holtgew 2009) demonstrate how institutional avoidance becomes available through managerial strategies such as organisational restructuring, lengthening of (service) value chains, use of temporary agency staff, outsourcing and subcontracting.

More in detail, sectoral peculiarities (the terms of competition) provoke certain strategies by companies. In search for a competitive edge and cost reduction, many organisations rely on what they see as growing rationalisation of work. These strategies involve a number of interventions to increase productivity and standardisation, such as introducing a piece rate or room quotas to be cleaned per hour (Kirov & Ramioul 2014, Vanselow et al. 2010). Even more importantly, according to several studies in the service industries, there is a clear the tendency of organisations to reduce their costs by outsourcing non-core business activities to special divisions or to other companies.

For instance, in their extensive report on call centre work around the world, Batt, Holman & Holtgew (2009) use subcontracting as an example of such externalization process: firms have increasingly shifted work from vertically integrated organizations with institutional norms and internal labour markets to new economic actors operating outside of these norms (see also Haidinger et al. 2014; Lillie et al. 2014). The contractual outsourcing and spatial relocation means that different employment relations and conditions apply to workers carrying out tasks that were previously or partially still are, performed within the client organization. The main argument is that outsourcing contributes to divergences because the receiving sectors mostly have less institutionalized industrial relations systems and are consequently less likely to be covered by sectoral collective agreements' (Haidinger et al. 2014).

In practice, companies acting as subcontractors often operate more cheaply by tapping into a more vulnerable labour force, such as posted workers or migrants, to whom they offer lower job security, part time work, more flexible working times and lower wages (e.g. Kirov & Ramioul 2014, Lillie et al. 2014, Vanselow et al. 2010). Furthermore, indications of the use of illegal practices among contract companies have been reported such as paying under collective agreements (Vanselow et al. 2010). As a result, the idea of a coherent national system supporting quality of jobs across skill and industry spectrums seems less solid. These results differ from the picture drawn by institutional theories such as production regimes laying out expectations that companies seek competitive advantage by relying on the given framework, instead of "race

to the bottom" companies in Nordic countries that rely on highly skilled workforce and choose the high road. The actual company responses vary. Crouch, Schröder & Voelzkow (2009) argue that companies act rationally in response to sector-specific challenges, being partly bound by the institutional framework that they encounter but partly acting to alter it. If the national institutional structure is not seen as adequate to deal with sector-specific terms of competition, in reaction to challenges posed by the market, company responses and strategies are likely to deviate from the national structure. Consequently, the continuity of institutional arrangements is determined by economic interests. The durability of an institution can rest substantially if rarely wholly on how well it serves the interests of the relevant actors. Where an institution fails to serve the interests, it becomes more fragile and susceptible to defection. (Hall & Thelen 2009; Crouch & al. 2009).

Haidinger et al. (2014) argue that these managerial strategies may not be purely interpreted as cost reduction or rationalisation strategies but rather as strategies of institutional avoidance. It has also been shown how for instance some call centres have been set up in a direct attempt to escape perceived institutional constraints (e.g. Haipeter & Pernod-Lemattre 2005). Institutional avoidance may also lead to a fragmentation of employment systems and thus undermine the overall regime, weakening the distinctiveness of a institutional frameworks (Flecker & Meil 2010). These strategies, or even threat of them, may weaken the strength of the organized labour and undermine its capacity to defend particular characteristics of a national regime –such as the characterized by the Nordic quality of work life regime. Consequently, it is clearly necessary to explore the conditions that shape variety within countries in order to understand the associated tensions and contradictions that may be drivers of change within a given national model.

4 METHODOLOGICAL CONSIDERATIONS

This chapter discusses the methodological questions of the study. Detailed technical descriptions such as data analysis strategies are kept to a minimum; the used surveys, EWCS and FWCS, are administered and collected by national and supranational agencies and further technical information can be found on their websites. Data analysis strategies and methodological choices of each individual sub-study are found in the articles and therefore, are not replicated in this text. Instead, this chapter concentrates on more general methodological issues regarding job quality research relying on survey data, especially from a comparative perspective. Specific attention is paid to the suitability of the data and chosen methods for studying job quality (trends) through quantitative methods and in a comparative perspective.

4.1 Datasets and their suitability

The leading study draws on three different data to approach the question on Nordic difference and its persistence. Country (group) comparisons are based on European Working Conditions surveys from 2005 (article I) and to assess the persistence of the alleged Nordic difference, EWCS 1995-2010 are employed (article II). The interpretations concerning whether gender gap in job quality prevails are wide in Nordic countries are based on analysis of EWCS data from 1995-2005 (article III), and seven waves of the Finnish working conditions surveys from 1977 to 2013 offer a test for the argument (article IV). *Quality of Life in a Changing Europe* –data (2007) (article V) is employed to make an excursion to quality of jobs in the service sector, especially those emerging within the new services, particularly call centres.

European Working Conditions Surveys

The European Working Conditions Survey (EWCS) collected in 1995, 2000, 2005, and 2010 is used in the empirical analyses of this thesis. The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is responsible for administrating, developing and organising the collection of the survey. The statistical population of EWCS was persons in employment according to the Eurostat Labour Force Survey criteria. 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 target number of interviews in each country has been 1000 in all surveys except in the year 2000, when it was 1500. However, there have been some exceptions from standard sample size. For example, the sample size in Luxembourg was lower (500–600) in surveys prior to 2010, while in 2010, the UK, Italy, Germany, France, and Belgium used increased sample sizes. The respondents were interviewed face-to-face in their homes outside normal working hours, and the overall response rate was 48 % in 2005 and 44% in 2010, although there was considerable variation in the participation rates in different countries. The dataset was weighted to correct for non-responses. The post-stratification weight is constructed to match the European Labour Force Survey's figures by using gender, age, occupation, sector, and region. More detailed technical information concerning the survey and its methodology are found in the Eurofound website: http://www.eurofound.europa.eu/surveys/european-working-conditions-surveys.

The sample of the EWCS is representative of all persons in employment in European Union member states. The coverage of countries has increased during the past decades to include all member states as well as some non-Member States such as Switzerland. Consequently, long-term trends can only be followed for older Member States. From the Nordic countries, Denmark, Sweden and Finland first joined the survey in 1995 while Norway joined in 2000. Iceland has not participated in the survey.

The surveys may be considered as reliable high-quality data as they are administered, coordinated, designed and developed by high profile experts, ensuring the theoretical as well as policy relevance of the contents. Furthermore, Eurofound determines the principles for sampling and fieldwork methodology, and as such, technical conditions of the process are ensured and the process of data collection is the same across all countries. The coordination of data collection by the Eurofound also ensures that the level of comparability should be high, at least in principle: not only are the concepts, definitions and classifications the same across Europe, even questions and specific items are identical. Of course, there is some flexibility for national adaptations — the translation process itself implies an adaptation of the questionnaire to national specificities (Hurley 2006).

This principle of equivalence is one of the most important premises of cross-cultural research methodology. Just as the reliability of a survey on a

national level is dependent on its ability to grasp the heterogeneity of its target group on all phases of data collection, cross-national surveys have to take into account cross-cultural differences, of which language is only one - if large – component (Jowell 1998). In other words, equivalence in cross-national survey research is a question of whether the concepts, questions and operationalisation are translated so that they fit to different national contexts and have similar meaning to respondents (Harkness 2007; Saris & Gallhofer 2007). In surveys tailor-made for cross-national purposes, such as the EWCS, this problem is addressed by involvement and cooperation of national experts in questionnaire development, as well as the involvement of national level experts in the translation process (www.eurofound/surveys/methodology).

An excellent example of the constant quality assurance and endeavours to develop EWCS is the qualitative post-test analysis reported by Hanna Sutela and Anna-Maija Lehto (2006): The project assessed and developed the quality of the EWCS 2005 questionnaire, especially on the areas of development at work and employability, and increased understanding on the role of national infrastructure, cultural context and gender in shaping respondents' answers. In other words, post-testing is a way of gaining knowledge on how respondents in different countries understood the questions and to identify incongruences in answering patterns due to translations and selected terminology. For instance, it was found that Finnish employees tend to report different forms of on-the-job-training much more actively than their UK counterparts, which could partly account for Finland's top score, with the highest incidence of training paid by the employer. It was concluded that the impact of national infrastructure, such as promotion of lifelong learning, also stood out in the answers of Finnish workers (Sutela & Lehto 2006).

The cultural influences and level of subjectivity in responses may also be reduced through answer categories. For instance, the EWCS queries on autonomy simply asks: "Are you able to choose or change the order of your tasks?" (yes/no). The dichotomous scores are also useful in cross-national comparative research as they increase objectivity and reduce cultural influences in the ways of responding, as the employee simply assesses whether some aspect is present in his/her work or not (Minkov 2013). The use of dichotomous scores is however somewhat problematic with regard to evaluating 'degrees of differences' (e.g. Sutela & Lehto 2006) as well as for further analysis. The obvious restriction of range, such as yes/no –categories in comparison to Likert scales, quite often causes asymmetrical distribution of answers. The unbalanced distribution reduces the likelihood of observing strong associations with other variables. EWCS researchers have tried to circumvent the problem in the analyses by compiling indices out of various questions.

Not only is the EWCS considered high quality data, it is also currently seen as the best possible available resource for studying levels and trends in job quality across European countries (e.g. Munoz de Bustillo et al. 2011). The EWCS has many advantages compared to other comparative data. There is scarcity of available high quality data suitable for purposes of international

comparison that would reach beyond labour market indicators (included for instance in the Labour Force Survey) to the level of jobs, reported and experienced by employees. While there are some international data, such as European Social Survey (ESS), its work-life related questionnaires only cover 2004 and 2010. Hence, there are not many data sources ensuring periodicity or indicators kept intact for decades and thus allowing analysis of trends. However, EWCS is not a panel (same individuals are not followed through time). Rather, the analytical strategy to follow up trends through time is based on using the surveys as repeated cross-sectional data. Thus, the methods used and results gained are not free from issues related to difficulties in determining causality, for example. However, the EWCS has also become widely used for comparative and trend analyses as it is available for the public free of charge from the UK Data Service in Essex, UK (http://discover.ukdataservice.ac.uk/).

Concerning the purposes of this study the sample size in individual countries (approx. 600-1000) allows for the production of good estimates of the overall incidence at national level of the phenomena captured in the survey. However, the main drawback of the EWCS data and the sample size per country is that when breaking down the results within countries by gender, occupation or whatever other variables, the number of cases used for specific estimations very quickly becomes too small and therefore the results unreliable. This is one of the reasons why this study has also used the nationally representative Finnish Working Conditions surveys to study the evolution of gender and socio-economic inequality in Nordic working life.

Finnish Quality of Work Life Surveys

The empirical analyses in article IV are based on pooled data of seven cross-sectional Finnish Quality of Work Life Surveys (1977, 1984, 1990, 1997, 2003, 2008 and 2013) carried out by Statistics Finland. The Finnish Working Conditions Survey (FWCS) is an extensive personal interview survey that monitors employees' working conditions and changes in them. The data is collected through face-to-face interviews using a standardised questionnaire. The sample is obtained from the participants in the Labour Force Survey by choosing either employed persons or wage and salary earners. Between. The response rate in the FWCS has varied between 91 and 69 per cent with a declining trend, and between 3,000 and 5,800 people were interviewed in each survey round. The analysis is restricted to employees from 15 to 64 of years of age. The data is available for (affiliated) research groups. The data is anonymised by Statistics Finland and does not contain any personal information; thus using the data does not entail specific ethical questions concerning protecting the identity of the respondents. More detailed technical information concerning the survey and its methodology can be found in the appendices of the regular reports (e.g. Lehto & Sutela 2008; Sutela & Lehto 2014) and Statistics Finland's website dedicated to the survey:
http://www.stat.fi/meta/til/tyoolot.html

The advantages and the disadvantages of the use of Finnish Working Conditions Survey in studying trends in job quality apply are broadly similar as with regards to the EWCS. The FWCS is administered, coordinated, designed and developed by high profile national experts, who are internationally networked and also work in close cooperation with, for example, Eurofound in the development of the EWCS. The survey development and collection as part of the National Statistical data collection activities have provided resources for its continuity, albeit these functions have not been protected from cost-saving pressures that the public services have faced in general. However, professionalism and institutional status of the survey have ensured the theoretical as well as policy relevance of the contents. The larger sample sizes allow better reliability when studying smaller sub-groups of employees. Although the period between each survey is 5 years or longer, the survey has contained questions kept intact to allow the follow-up of certain trends. Statistics Finland also published its own broad reports concerning changes in working conditions, (e.g. Lehto & Sutela 2008; Sutela & Lehto 2014), at times also translated into English (e.g. Lehto & Sutela 2005).

Similarly, as with regards to the EWCS, efforts have been targeted towards the quality assurance and to develop the FWCS by qualitative methods. For instance, a lead expert of Statistics Finland, Anna-Maija Lehto, who has a long career in collecting and developing the FWCS, prepared her PhD on the development of survey methods to study working conditions (Lehto 1996). Her PhD research took a critical stance towards positivist research and survey methods, also bringing out defects of surveys in revealing deep processes of change. Consequently, the FWCS has been developed and complemented by qualitative research tools: for instance Noora Järnefelt together with Anna-Maija Lehto (2002) studied the prevailing intensification and increasing hurriedness in Finnish work life. As such, it is widely accepted that social surveys are not good at uncovering deep processes of change – for these purposes surveys need to be used in a complementary way with ethnographic, case study and other qualitative enquiries (see e.g. Green 2006, 4).

Quality of Life in Changing Europe -data

The comparative study on service sector work in Finland, and the case on job quality in call centres more specifically, is based on data provided by the *Quality of Life in Changing Europe* (FP6) -project. The survey data concerning the quality of work life issues were collected in 2007 from service sector organisations representing retail, banking and insurance, telecommunications, and public hospitals in eight European countries (Finland, Sweden, the Netherlands, Germany, the UK, Portugal, Hungary, and Bulgaria). This study was restricted to Finnish data (N = 967), on the mentioned four sectors, which included a telecom organisation's call centre functions. Overall, 435 telecom employees and managers filled the online questionnaire (response rate of 59%). The comparison group consisted of employees (N = 467) working in service

sector organisations, representing retail (N = 113), banking and insurance (N = 218), and health care (public hospital, N = 164). The response rate varied between the organisations (banking 76%; hospital 47%; retail 35%) and majority gave their responses via an online questionnaire. If an employee did not use a PC in his/her daily work, paper questionnaires were distributed to him/her.

The survey data was complemented with establishment level information from the telecommunication company's call centre functions. This data consists of various human resource indicators (e.g. number of temporary contracts, temporary agency employees, turnover) included in the survey in quantitative form as well as face-to-face interviews with managers and supervisors concerning competitive strategies, managerial practices and well-being at work.

As the data was gathered only from four organisations, they are not representative of the sectors. Among other call centre studies, it has been rather common practice to collect data only from one organisation. The question of representativeness is, however, important with regard to comparative research designs based on company studies. Earlier research shows that differences between companies within the same sector may be as large as differences between different types of work in different sectors (Søderfeldt et al. 1997). This is especially the case for company-specific organisational and managerial cultures and practices, which may have a significant influence on perceived working conditions. The call centre sample here included just one large organisation, but it was—as well as data gathering—subdivided into several local organisational units with notable organisational independence. It may be expected that if there were local organisational cultures and managerial practices present, they would be found in the data. However, it is clear that the data is not representative of the call centre industry as such – rather, the data allows the researcher to approach it as a particular case capturing important processes of change in work life.

4.2 Analytical strategies

The question on the existence and persistence of Nordic QWL model is mainly considered through the variable oriented approach, relying on survey data. Comparing levels and trends in job quality across countries entails methodological choices and issues that have to be taken into account. The issues relating the specific datasets were briefly discussed in the previous section.

As introduced in Chapter 2 in the definition problems of job quality, the researcher has to make a choice on whether subjective or objective indicators are more suitable for the measuring wellbeing of employees. Along with current mainstream job quality research, this research follows an objective approach, instead of relying on purely subjective measures such as satisfaction. As discussed earlier, some of the objective indicators include subjectivity, i.e. perceived job insecurity and as such may also be considered as subjective indicators (keeping in mind the distinction to items querying satisfaction to job

security). At the early stage of the research project, our team aimed at including in the analysis both 'objective' (e.g. type of contract) and 'subjective' (I might lose my job) questions for each job quality aspect (see e.g. article I). However, lack of data did not allow us to follow this methodology in trend analysis (e.g. articles II and III). This choice was also restricted by space in other contributions. Inclusion of both objective conditions and the situation as perceived by the employee would have enhanced the quality of the interpretations.

It follows that the study relies on both descriptive as well as multivariate methods to study *a) differences between countries, b) sectors of employment and c) changes through time*. To study these questions entails specific methodological choices in terms of analytical strategies. Descriptive methods, such as percentage distributions, mean values and graphs, are used to illustrate differences in the levels of job quality. The figures, based on simple mean comparisons and cross tabulations of percentages, may face the criticism of lacking proper analytical methods. It may be argued that behind the simple descriptive statistics, any observed difference could be (partly) explained by compositional differences between countries in occupational structure, sector, industry or other factors.

Consequently, to verify that country differences would not be due to these structural differences, the sub-studies (excluding article III) to introduce a method to control for socioeconomic and structural factors. Therefore, the chosen analytical strategies include varying types of regression models where the effects of age, gender, occupation, industry, sector and country are controlled for. For instance, in article II, depending on the nature of the dependent job quality measure, either linear or logistical regression models with country dummies as explanatory factors are employed. Entering age, gender, occupation, sector, and industry dummies as covariates in the regression models allows us to compare differences in job quality between countries' structural differences. This strategy has been previously used in the analysis of country differences and trends in job quality (e.g. Gallie 2003; 2005; Green and McIntosh 2001; Eurofound 2012). In article IV, the method employed is linear probability model (LPM), which is considered to have some clear advantages over logistic regression and other non-linear models (Mood 2010).

The main aim of these methodological choices and technical procedures is to decrease the possibility that if, for instance, we find higher job quality in Nordic countries compared to Southern European countries, it would not be due to variation in their economic structure. In other words, the result of Nordic countries reporting high job quality would in fact be due to its higher share of employment in knowledge-intensive services and lower share in agriculture and industry (see e.g. Muñoz de Bustillo et al. 2011, 219; Lorenz & Valeyre 2005). Similarly, when studying change through time, it is important to account for changes in compositional differences of the workforce and changes in sectoral distribution of employment to avoid misleading interpretations.

To give a concrete example, recent reports have found that the average level of autonomy increased significantly in Southern and Eastern European

countries during 2005-2010 (e.g. Eurofound 2013a; see also Mustosmäki et al. 2013). Was this due to actual improvements in job quality or to policy-making and managerial practices? Most likely not totally, as researchers Gallie and Zhou found in their report for Eurofound (2013a) that the change was probably due to shifts in employment structures: the employees who lost their jobs in the aftermath of the 2008 recession, left mainly from low-skilled jobs, where the average level of discretion was also lower. In other words, what might seem as increase in the average levels of e.g. task discretion might result from changes in the economy and structure of production and employment rather than in improvement of intrinsic quality of jobs on individual level.

Another important methodological choice relates to the strategy between 1) comparing country groups, often called regimes (see e.g. Peña-Casas 2009; Holman 2013a; Eurofound 2015a) or 2) choosing individual countries for comparison. In the latter option, an individual country may be seen as an ideal type, representing certain institutional constellations (e.g. Gallie 2007; Holman 2013b; Olsen, Kalleberg & Nesheim 2010). The sub-studies included in the leading study have used both strategies. For instance, for article III, the strategy was to follow changes in job quality in five European country groups (whose institutional differences are presented in the theoretical framework in section 3.2). The *Nordic countries* include Denmark, Finland, and Sweden (excluding Norway because it was included in the EWCS surveys only from 2005 onward). *Liberal countries* included are the UK and Ireland, while Belgium, Germany, France, Luxembourg, the Netherlands, and Austria are classified as belonging to the *Continental regime*. The *Southern regime* comprises Greece, Spain, Italy, and Portugal. Finally, the *Eastern European* new member states in the study include Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia.

This clustering of countries is widely used but also much criticised since it tends to mask the internal diversity in the groups. None of these groups is completely uniform: there is diversity within the groups, and a certain amount of hybridisation between them. Similar critique may be pointed towards the main research question and main concept of the study: is it meaningful to refer to Nordic working life regime? While categorisations are an efficient tool to simplify complex reality, certain category may be considered self-evident to the extent that its use or existence does not become questioned (Tervonen-Gonçalves & Oinonen 2012). The use of "Nordic model" may be considered entailing such risks.

It may be questioned whether this group of countries forms a sufficiently coherent whole. It is important to recognise how there are institutional differences between these countries included to the Nordic regime. For instance, Denmark lacks the kind of working life development programme Sweden and Finland have (Alasoini 2016a) and Finland does not have employee board representation in companies such as Sweden and Norway have (e.g. Movitz & Levinson 2013). There is also debate on Finland being an institutional and empirical outlier of the Nordic model (Alasoini 2000; 2016a; Gallie 2003;

Gustavsen 2007; Elvander 2002). Also recent research has aimed at sheding more light on differences in family policy models between Nordic countries and consequent divergencies concerning gender gaps in work life (Grönlund, Halldén & Magnusson 2017). The choice of referring to broadly to Nordic countries, however, seen justified in light of theory and research, presented in chapter 3.

In addition to the theoretical models themselves, they may be questioned when fitted to data: does the empirical reality correspond to theoretical models? Interestingly, even when comparative research departs from rather distinct theoretical perspectives, analysis often produces similar (above mentioned) country groups; such as employment systems (Bosch, Rubery & Lehndoff 2007), production regimes, employment regimes (Gallie 2007; Gallie 2011; Hult & Svallfors 2002), job quality models (Davoine et al. 2008), flexibility regimes (Anxo & O'Reilly 2000; Kerkhofs, Chung & Ester, 2008; Chung & Tijdens 2013), as well as gender regimes (Lewis 1992), and working-time regimes (Anttila et al. 2015; Rubery, Smith & Fagan 1998). Regime theories as well as empirical research relying on these theories have analytical value and are important to compress information. However, the possibility of variation within country groups needs to be taken into consideration (e.g. Peña-Casas 2013).

However, the critique towards the internal inconsistencies within country groups is also evident when following (job quality) trends: countries within one group might have diverging trends with regard to e.g. development of task discretion. Consequently, in article II, the EU15 countries are classified according to theories of production and employment regimes, but all of the analyses were conducted on individual countries, not regimes. This enables consideration of whether trends inside these regimes are homogenous or not. Recent research has pointed out that depending on the criteria used, there are countries that could belong to one or another regime; Gallie (2011) points out clear differences between the UK and Ireland and questions the validity of grouping them into the same regime. Similarly, the Netherlands, Austria and France have been found to be theoretically as well as empirically challenging to place within regimes. This poses fewer problems, since in the article II all analyses are conducted for individual countries.

5 RESULTS

Institutional theories and their extensions to production and employment regimes lead us to assume that Nordic countries are incontestable leaders in European job quality comparisons. The Nordic working life model is seen as resulting in the high, intrinsic quality of jobs. Labour legislation and strong unions are expected to protect employees from job insecurity and employers' constant endeavours to intensify work processes. In addition, the unique institutional framework is seen as preventing class inequalities from growing larger. The gender gap, however, is expected to appear wide and persistent. Nonetheless, critique presented to the institutional theories is that they are unable to recognise the dynamic nature of institutions and change in work life. This chapter summarises and discusses the durability and threats the Nordic QWL model is facing in light of the empirical results reported in the articles. The aim is to investigate how job quality has changed in European countries and to determine whether Nordic countries have retained their advantageous position concerning job quality as institutional theories lead us assume. In contrast, if we find increasing convergence in job quality between European countries the results would indicate a declining role of the institutional setting due to increasing pressures of globalisation.

5.1 Are Nordic countries (still) different?

In general, the results, which are based on national averages, speak in favour of the existence and persistence of the Nordic job quality regime. Briefly, the findings corroborate previous research supporting institutional theories that show Nordic countries have the highest proportion of workers reporting high intrinsic job quality. Furthermore, results indicate rather modest changes over time and substantial variation between country clusters in job quality, thus providing limited support for universal theories on work life change and convergence. However, there are also contrasting results concerning

intensification of work, which are difficult to explain in terms of either institutional or universal theories on work life change. This chapter further develops these findings on Nordic difference taking into account the core aspects of job quality as a) possibilities to use and develop skills at work and influence the daily organisation of work as well as b) the intensification of work and c) job insecurity.

Contrasting trends in possibilities to use skills and influence one's work

When analysing changes in possibilities to use and develop skills as well as possibilities to influence ones work, the results provide support for institutional theories on Nordic difference through three main findings: 1) Overall, Nordic countries display the highest proportion of workers whose jobs include good possibilities to use and develop skills as well as to influence the organisation of work, 2) contrasting trends between the inclusive Nordic and the liberal UK regimes, and 3) the changes are rather modest in most European country groups/regimes; stability and persistence of country differences may be interpreted as signalling the influence of institutional frameworks.

Firstly, when analysing changes and consequent country differences in levels of intrinsic job quality in European countries during 1995-2010, the results suggest that *Nordic countries stood out as the only country group where the intrinsic quality had remained on a high level and continued to increase.* Continental countries represent the "EU-average" and Southern and Eastern European countries remain on a lower level (Article II, III). As expected in the employment regime theory (Gallie 2007; 2011), Nordic societies, which represent the inclusive employment regime model, remain relatively distinct in terms of the quality of work – also from Continental societies (article II, III), which are closest in their pattern of employment regulation, to the dualistic regime model.

Secondly a finding that further supports institutional theories' assumptions is the contrasting trends between the coordinated Nordic countries and the liberal UK (and Ireland). Specifically, the possibilities to use skills and influence ones work have declined in the liberal UK. In fact, in 1995 the amounts of jobs allowing the use of various skills and the exercise of discretion were equally high in the UK as in Nordic countries. However, the level of these types of jobs deteriorated significantly in the UK while remaining high and stable in Nordic countries (Article II, III). The declining trends in liberal countries as well as the high and stable/increasing level of intrinsic quality in Nordic countries are both in line with the predictions of the production and employment regime theory. Also, previous studies relying on various datasets have reported stable or positive development of possibilities for skill use and autonomy at work in the Nordic countries (Johnson et al. 2009, Lehto & Sutela 2009, Lopes et al. 2014). Similarly, the decline in skill development and autonomy has also been reported based on other data such as the British Skills survey and International

Social Survey Program (Feldsted et al. 2007; 2012; Inanc et al. 2013; Olsen et al. 2010)

Thirdly, keeping in mind both the optimistic and the pessimistic universal theories' predictions concerning the rise of the knowledge-based service societies and technological revolution, the changes in intrinsic job quality are modest in most European countries. More specifically, the analysis of possibilities to use skills and work autonomously in 1995-2005 showed how differences in intrinsic job quality between country groups seem rather persistent, as Nordic, Continental, Southern and Eastern country groups represented quite stable developments and remain so after controlling for background factors such as age, gender, occupation, sector, and industry (article III). These results do not find clear and strong support for convergence. Rather, the results on persistent differences and stability may be interpreted as supporting institutional theories.

Yet it has to be noted, that as there are strong structural change processes that should clearly affect intrinsic job quality aspects positively, firm and definitive conclusions should not be drawn based on one type of data and methodology. When the used measure for skills use is compared to other research, it is based on a rather narrow concept of skill and does not note changes in training or learning time, qualifications needed, communication, basic skills in numeracy and literacy or IT skills (see e.g. Green 2006). However, the approach to conceptualise and measure possibilities to use various skills at work (also labelled as cognitive skill requirements) and the level of autonomy in this particular research, is broadly supported and used (e.g. Berglund et al. 2014; Eurofound 2015; Leschke, Watt & Finn 2008; Lopes, Lagoa & Calapez 2014; see also Greenan & Kaluniga 2013). As mentioned previously, similar results, especially concerning the Nordic difference as well as declining complexity and autonomy in various countries have been found to use different surveys with slightly different items and response scales. Yet when contrasting these results on (surprisingly) modest changes with general theories on work life change, it is possible to conclude that there might be some flaws or insufficiencies in the methodologies or interpretation of results.

Intensification of work

To summarise the main findings concerning trends and levels of work effort, two main points are highlighted. 1) Overall, results *run counter* to the institutional theories: work effort in Nordic countries increased and remained on comparatively high levels whereas decline was reported in liberal countries. 2) contrasting trends and varying levels of work intensity do not uniformly correspond to pessimistic universal theories' predictions concerning intensification of work.

First, descriptive results for 1995-2005 show that indeed working in high speed and to tight deadlines have increased in Nordic, Continental and Southern European countries but declined in liberal UK & Ireland during the

whole period. The most remarkable increase in the work pace was observed in Southern Europe. Yet Nordic employees report the highest levels of time pressures both in 2005 (Article II) as well as in 2010 (article III). Controlling for background factors (age, gender, occupation, sector, and industry) roughly confirms the overall picture of comparatively high time pressures in Nordic countries throughout the study period as well as the declining pattern in the UK (article III). Long term trend towards deintensification of work has also been detected in the British skills survey (Feldsted et al. 2013).

This again contrasting trend between Nordic countries and the UK, run counter to the regime theories' assumptions. The results are difficult to place in the institutional framework where powerful trade unions or employment legislation would be able to insulate Nordic workers from employer endeavours to intensify the work process and efficiency by increasing work pace and control. Neither do the results uniformly support universal theories on convergence. Some earlier studies found convergence in work intensity, mainly due to stable but high intensity in other countries and increasing intensity in countries previously exhibiting low levels of work intensity (e.g. Eurofound 2015; Mustosmäki et al. 2013; Olsen & al. 2010). Institutional factors such as trade union density, employment protection or welfare expenditure were not empirically associated with trends in work effort. Instead, increases in work intensity were associated with macro-economic factors such as low Gross Domestic Product and high unemployment (Eurofound 2015). However, the studies that adopt an analytical strategy on the level of jobs, i.e. those that take into account how different job quality factors are combined in a job, find support for institutional theories. According to psychosocial perspectives, high intensity is not problematic when combined with high complexity and autonomy, and interestingly, the prevalence of this type of 'active jobs' in Nordic countries is the highest in Europea (Gallie & 2013; Holman 2013a; Parent-Thirion et al. 2007). Consequently, as concerns the measurement of intensity, it is possible to point critique towards the items and chosen strategy in this study.

Job insecurity in light of non-standard contracts

Comparing trends and levels of job insecurity using the objective measure of non-standard contracts, the main result that draws attention is: job insecurity in Nordic countries is at a comparatively low level due to a decline in the incidence of non-standard contracts in 1995-2005. More so, the prevalence of non-standard employment contracts – which refers here to non-permanent employment contracts, such as fixed-term contracts or temporary agency work contracts – was at the lowest in Nordic and Continental countries in 2005 due to a declining trend (article III.) Hence, the hypothesis on Nordic difference with its specific institutional framework leading to low insecurity gains support due to relatively modest trends and the low incidence of non-standard contracts. Yet regarding subjective insecurity, in 2005 Nordic employees were as likely as

European employees on average to worry over the possibility to lose their jobs in the near future (article I). However, none of the sub-studies included the comparative trends in subjective insecurity as the item was included in the EWCS data in 2005 only. Other comparative research point out that subjective insecurity in Nordic countries is at a relatively low level (Erlinghagen 2008; Esser & Olsen 2012; Green 2009; OECD 1997).

In contrast, the level of non-standard is higher in liberal[2], Southern and in the Eastern European countries in 2005 due to an increasing trend. The most common non-standard contracts are in the Southern European countries (article III.) Placing these results within the institutional framework requires closer scrutiny of the meaning of various institutions for the type of contracts and insecurity related to them. The theories on employment regimes suppose that the institutions and trade unions are likely to protect the interests of the core workforce. Employment protection enjoyed by core workers may thus lead to higher prevalence of non-standard employment with regard to conditions of strictly regulated hiring and firing – flexibility is sought through fixed term and temporary agency employment. The high prevalence of non-standard contracts in Southern European countries reflects the rigid labour legislation protecting the core work force but creating a large pool of non-standard employees. (Davoine et al. 2008, Paugam & Zhou 2007.) Yet the results contrast with the expectation laid by institutional theories on paucity of temporary employment relationships in liberal and Eastern European countries, which represent the most relaxed regulation on firing permanent employees. The results might be due to the analytical strategy adopted to study country groups and non-standard contracts as a group of atypical employment relationships; within groups there might one individual country, such as Poland, where temporary contracts have increased while such contracts have remained on a lower level in other countries (see e.g. Eurofound 2015b; Hipp, Bernhardt & Allmendinger 2015; OECD 2014). However, previous research points out that in eastern European countries, employees report higher socio-economic insecurity (e.g. Green 20009; Peña-Casas 2013) as standard contracts also involve higher insecurity due to an absence of restrictions to hire and fire. Hence, overall results of this study gained through aggregate country level comparisons roughly provide support for the institutional theory and are in line with earlier research.

When discussing the results in the light of other recent research, it becomes evident that the chosen methodological approach is too narrow to study insecurity in order to make sound conclusions. Job insecurity has probably been the most rapidly growing area of work life research (e.g. Doogan

---

[2] We should interpret the rising trend and consequent high level of non-standard contracts in liberal countries in 2005 cautiously, as according to Labour Force Survey statistics, the number of fixed term contracts have remained under 10 per cent during 2000-2010. Consequently, the comparisons would look rather different if they relied solely on fixed term contracts. Due to the operationalisation used in the study, the high level of non-standard contracts in liberal countries may be due to higher proportions of agency work as well as employees working without official contracts.

2015). Consequently, the conceptualisation, theorisation and measurement have all developed exponentially during recent years. Although it seems there have not been major changes in "objective insecurity" measured in terms of temporary contracts, there are other objective measures which support the rise of insecurity. When reviewing recent research, it is quite clear that not only quantity, but quality of temporary employment should be taken into account, in addition to broader changes in the types of employment relationships.

Changes in the use of temporary contracts have been reported: for instance, the duration of fixed term contracts had decreased in many countries from 2006-2012. In Finland and the Baltic states, the share of contracts over one year dropped dramatically. The shares of fixed term contracts in new hires had risen in almost all OECD countries by up to 75% and higher on average in countries such as Sweden, Spain, Slovenia, Portugal and Poland. (OECD 2014.) It has become more common to work under fixed-term contracts because permanent jobs were not available (Pärnänen 2015a). The role of temporary employment as a stepping stone is also questionable as majority of temporary employees, for instance in Finland, will either take up another temporary contract with the same employer (40% in 2013) or did not know what would happen after the contract ends (24%) whereas less than one in ten will continue under permanent contracts (Sutela & Lehto 2014, 39-41).

It is evident that when concentrating on amount of temporary employment contracts, the picture on labour market change remains restricted. Instead, a more favourable methodological approach would consider changes in the overall types of employment. For instance, based on the Finnish Labour Force survey, Anna Pärnänen concluded that the picture of employment contracts has become increasingly fragmented. While full-time employment under fixed term contracts have decreased in Finland from 2000-2014, full-time and fixed term part-timers, self-employed, freelancers and scholarships have increased. Also, around 83,000 employees were working under so called zero-contracts in 2014 which corresponds to 4 percent of all employed in Finland (Pärnänen 2015b, SVT 2014). While various forms of self-employment are growing, around a fifth of Finnish self-employed (30,000 people) felt that it was current circumstances that forced them to work as entrepreneurs (Pärnänen & Sutela 2013). Similar processes of change are visible in other European countries (e.g. Allmendinger et al. 2013, Eurofound 2015c). Consequently, firm conclusions on the change in job insecurity based on single measure of non-standard contracts should not be made. Furthermore, taken together the rapid development of conceptualisation and theorization of job insecurity and precariousness, it would be societally dangerous to argue, based on a single measure of fixed-term contracts, that job insecurity has not been increasing.

5.2 Abating inequalities? Class and job quality

Much of the recent public discussion and research concentrated on job polarisation, i.e. on labour market being divided into lovely and lousy jobs. Same pressures of change that are seen to alter the structure of the labour market, are seen to affect quality of jobs differently on varying skill levels: the rise of the knowledge society and educational expansion, technological change, and tertiarisation are seen to pose accentuated risks especially for low skilled workers (see e.g. Gallie et al. 2013; Green et al. 2013). In contrast, the highly educated are shielded from the degradation of job quality (Clark 2005). In other words, inequality in job quality between high and low skilled would increase.

Research enlightened by comparative and institutional perspectives detected diverging developments of both structural change and job quality polarisation risks across countries (e.g. Eurofound 2013b; Gallie et al. 2007). It seems that quality of jobs on various skill levels might vary according to the regime: institutions in distinct countries might have varying capacities in protecting the job quality of the lower skilled. It is notable that Nordic countries are distinct in terms of low class polarisation risks in job quality (e.g. Gallie et al. 2007; Lopes et al. 2013).

The main finding of the leading study is that in fact, class inequality in job quality in Finland decreased in terms of all four measured job quality aspects: skill development, autonomy, intensification and insecurity. The results show how, contrary to the expectations outlined by the universal theories on polarisation of quality of jobs and increasing disadvantage of lower skilled, inequality has decreased between blue and white collar employees according to all measured job quality indicators during the period of study extending from 1977 to 2013. The analyses revealed that improvements occurred for blue-collar workers in terms of autonomy and opportunities for development at work. Meanwhile, participation to training, development opportunities and autonomy declined for upper white-collar men, reducing the gap between employees in different occupational groups (article IV).

These results are consistent with the institutional theory's prediction of low risk of polarisation in coordinated and inclusive Nordic countries (Gallie 2007a). Results are also in line with earlier comparative research pointing towards low class (skill) inequality in job quality in regulated Nordic countries compared to liberal economies that report higher inequality and polarisation based on class (skill) levels (see e.g. Esser & Olsen 2012; Gallie et al. 2007; 2013; Green et al. 2013; Stier 2015). The result is also in line with the argument that the lower skilled, in particular, would benefit from the provision of services and the protection provided by institutions (e.g. Soskice 2005; Mandel 2012). It is also likely that the specific work life programs and so called 'high road strategies' supported by the labour market parties including the Finnish government would have had an effect on the enhanced job quality reported by the blue-collar workers (e.g. Gallie 2002).

It is notable that low inequality and class convergence is not only due to the enhancement of job quality of the lower skilled, despite the importance attached in much of the literature to the meaning of institutions in benefiting 'the bottom'. It was also a result of 'downward class convergence' (Gallie 2015), resulting from the degradation of job quality of those in higher class positions. As a matter of fact, the higher skilled have not entirely been protected from the degradation of job quality as some researchers envisioned (e.g. Clark 2005). The results suggest that upper white-collar men and women have not been protected from the negative sides of work life change such as intensification of work and increasing insecurity. Time pressures and job insecurity have become common experiences regardless of class (Article IV). The results share similarities with Gallie et al. (2016), who found, based on a UK Skills data, that high skilled jobs were more stable and secure back in the mid-1980s, but by 2012 class differences in employment security had been eroded and there was no longer a significant class differential.

The results of growing insecurity among various employee groups across countries resonates with other recent research in the field of precarisation, which recognises that job insecurity has spread into the more highly educated segments of the labour force across countries (e.g. Haüsermann et al., 2015; Kalleberg 2011; Lempiäinen, 2015; Solheim & Leiulfsrud, 2015). Consequently, it is possible to contend that there has been a general increase rather than polarisation in job insecurity, and that this pattern is not specifically Nordic. Yet several studies have pointed out that job security is still on a higher level in Nordic countries compared to more flexible labour markets (e.g. Gash & Inanc 2013; Stier 2015).

Of importance are also the findings on degradation of job quality experienced by upper white-collar men who reported declining autonomy and restrictions in access to training (Article IV). In current research, it is rare to take into account gender and class simultaneously, therefore the comparisons to other research taking into account only class is challenging. Earlier research has reported declining trends for the highly skilled in the UK in terms of training possibilities (Green et al. 2016a) as well as job autonomy (Gallie et al. 2004; Green et al. 2016b). Similarly, as in the leading study, Gallie (2015) found some signs of class convergence in the UK in terms of job quality, but namely in the public sector and due to the degradation of job quality of managers and higher professionals. He concludes how the principal driver of changes in class inequalities are employer policies. These conclusions resonate with theories on development of systems of bureaucratic work control (Edwards 1979) which Gallie (2015) has labelled as theories predicting class convergence whereby an increasing number of managerial, administrative and technical specialists become subjected to control through organisational rules, standardisation, procedures of individual appraisal and performance measurement techniques. While, originally, these ideas were placed to private sector organisations, they are key themes of 'New public management' that have gained popularity since the 1990's (see also Oinas et al. forthcoming).

Consequently, further (comparative) research is needed to evaluate whether degradation of job quality in (male) white-collar work is universal or specific for certain institutional settings. Also, whether degradation of (male) white-collar work is situated unevenly in the public sector is a question requiring further scrutiny. The following chapter will handle gender differences in job quality trends between various regimes but will also continue on the issue of class polarisation risk by integrating intersectional perspectives into the analysis.

5.3 Enduring inequalities? – Women's job quality disadvantage on the Nordic labour market

Although Nordic countries have been nominated as women-friendly welfare states, gendered VoC theory and its hypothesis on adverse effects of institutions led us assume the gender gap in job quality would be more marked in Nordic countries compared to other employment regimes. Generous welfare state policies create disadvantage for women in the labour market in two ways: 1) generous family policies are expected to lead into statistical discrimination making employers reluctant to invest in hiring and training women, especially the highly skilled, and 2) enforcing high occupational segregation, especially through creating public sector employment. Consequently, women in the Nordic labour market would face more difficulties in achieving good quality jobs compared to their female counterparts in less regulated labour markets and less generous welfare states (Estévez-Abe 2005; Mandel & Semyonov 2006). It is also argued that institutional framework would have an interaction effect regarding class and gender inequalities: institutional framework in Nordic countries would have adverse effects especially for highly skilled women, hindering them from achieving in work-life (Estevéz-Abe 2009; Mandel & Shalev 2009; Mandel 2012).

Previous studies give mixed verdicts: although gender gap in work life in Nordic countries were reported as wide according to various indicators (e.g. Gallie 2007b; Mühlau 2011), there was reason to believe that the assumptions on the welfare state paradox might be overstated and need further examination, taking into account both change in time as well as intersectional perspectives on women in different class positions (Korpi et al. 2013; Rubery 2009).

Against this background, this chapter focuses on the third research question on the welfare state paradox on assumptions resulting in wide and persistent gender gap in job quality in Nordic countries. The answer is sought from two separate studies and datasets. Firstly, I evaluate whether gender gap in job quality is wider in Nordic countries compared to other institutional constellations. The results are drawn from a book chapter that studied changes in job quality experienced by men and women across five country groups representing various institutional frameworks (article III). The analysis relies on

the European Working Conditions Survey 1995-2005 combining 25 EU countries. Secondly, the assumption on interaction effect of class and gender resulting in especially wide gender gap in job quality among the highly skilled in Nordic countries is reviewed based on the Finnish working conditions survey 1977-2013 (article IV).

The results provide partial support for claims on the comparative disadvantage of women in the Nordic labour market. When looking into developments through time and the consequent gender gap in each regime, results suggest that although the gender gap in job quality has narrowed in every regime during 1995-2005, women in Nordic countries still seem comparatively disadvantaged compared to women in the labour market in other regimes (article III). The relatively wide gender gap in Nordic countries is broadly in line with VoC theorisation on higher gender inequality in work life in economies reliant on specific skills (e.g. Estevez-Abe 2005) as well as earlier research on wide and persistent gender gaps in job quality in Nordic countries (e.g. Gallie et al. 2007).

In addition, the Nordic countries prevail as the only country group where jobs performed by women exhibit lower levels of autonomy than jobs of men. In Nordic countries, women report equally high levels of work pressures as men – the highest in the European comparison – whereas in all other regimes it is still men who face the highest pressures. The gender gap in non-standard contracts also seems rather persistent in Nordic countries. Yet in 2005 the gender gap in relation to possibilities to use skills at work were on a similarly low level in Nordic, Liberal and Eastern European countries and highest in Continental and Southern European countries (article III).

How could these results concerning the Nordic female disadvantage in autonomy, hurriedness and non-standard contracts be accounted for? Do these results support the welfare state paradox hypothesis? As the connection of institutions and job quality outcomes is not empirically evaluated, the explanations are at best tentative. The restricted autonomy of women in Nordic countries might relate to gender segregation in the labour market and jobs typically performed by women: women often work in health and care jobs in the public sector and private services where personal discretion, related to for instance, working time or ways of organising work, are low (for Finland see e.g. Sutela & Lehto 2014). The use of non-standard contracts has been connected to extended family leaves, creating the need to replace employees, which might be one factor explaining the durability of the gender gap. High work pressures experienced by women have also been connected to public sector work, for instance in Finland where previous research indicates that time pressures are most prevalent in health care, education and social work as well as in the local government sectors, which are female dominated branches (e.g. Järnefelt & Lehto 2002; Sutela & Lehto 2014). Those sectors have faced cost reduction pressures due to the problems of public financing, while working conditions have deteriorated, for instance, as a result of not hiring substitutes. Gendered VoC theory has not explicitly included the crisis of the welfare state or austerity

measures into discussions concerning gendered employment outcomes, but it has been done elsewhere and is considered highly relevant when considering the long-term well-being effects of women (e.g. Hirvonen 2014; Mänttäri-Van der Kuip 2015; Karamessini & Rubery (eds.) 2013; Leschke & Jepsen 2014).

Despite the comparative disadvantage of Nordic women in terms of autonomy, hurriedness and non-standard contracts, results suggest that Nordic women report high levels of possibilities to use and develop skills (article II)). The comparatively low gender gap in 2005 in possibilities to use and develop skills at work in Nordic countries may be interpreted as signalling positive developments in women's career attainment and achieving jobs that provide better capabilities. The result may be seen in line with recent changes in the job structure: women have experienced job upgrading in terms of skills (the skill levels of jobs occupied by women have increased), while the gender wage gap narrowed in Sweden and Denmark over the period of 1995-2007 as women took a higher share of well-paid new jobs than men (Grimshaw & Figueireido 2012; see also Tåhlin 2007).

The result concerning the wide gender gap in possibilities to use and develop skills at work in Continental and Southern European countries may be interpreted as highlighting the argument outlined by Gallie (2007a), on how dualist employment regimes tend to reinforce the gender divide as women are less likely to be a part of the core workforce. Lower skill content of jobs may reflect the fact that actually it is in the regimes that do not assist with work-life integration that women have difficulties remaining in employment and holding high quality jobs (e.g. Hegewisch & Gornick 2011). Literature shows that in conservative welfare regime countries, women are often in part-time jobs (e.g. Hipp et al. 2015), and therefore, it should be studied more in detail how these job quality aspects are combined at the level of jobs in various regimes. Do women's jobs in dualistic and market regimes offer less possibilities to use and develop skills, less intense pace and pressures with better possibilities to influence one's schedules – and are such jobs easier to combine with family responsibilities in less generous welfare states? Do these jobs offer inferior career attainment and capabilities? The limitation of this discussion is that it does not recognize how women work in different occupations and positions.

A further question is posed on how an institutional framework might have differentiated consequences for women of different classes. According to previous studies, labour force participation of women varies according to class and the welfare state framework: generous family policies, especially the publicly provided and subsidised (non-parental) childcare, invoke less educated women into paid employment (e.g. Korpi et al. 2013; Mandel & Shalev 2009a). However, the differences in the labour force participation between countries are low among highly skilled women (e.g. Evertsson et al. 2009). Yet according to gendered VoC it was in terms of career achievement and reaching high quality jobs that women hit glass ceilings in Nordic countries, due to generous policies harming their image as workers (e.g. Estevéz-Abe 2009; Datta Gupta et al. 2008). This claim on comparative disadvantage of highly educated

women in Nordic countries is supported: while the gender wage gap is low among the low skilled, it grows in higher earnings groups (e.g. Datta Gupta et al. 2006; Korpi et al. 2013; Mandel 2012). Furthermore, there is evidence that gender gap in the likelihood of holding a supervisory position is larger in Nordic countries than in liberal countries (Dämmrich & Blossfeld 2016; see also Abendorth, Maas & van Der Lippe 2013).

The main results of the study support do not fully the assumptions of the welfare state paradox, and especially not when looking at the gender-class nexus across time in terms of job quality. First of all, gender gap is somewhat persistent between the blue and lower white-collar men and women with respect to job quality: *in general* men have have had, and still have, better opportunities for development, influence on their work and on-the-job-training than their female counterparts. In addition, the increases in perceived job insecurity were larger for women (article IV.) The wide and persistent gap in job quality between men and women in blue collar and lower white collar occupations may be understood through welfare state paradox: It is likely that women face difficulties in accessing and remaining in high quality jobs, and these results hold even after controlling for age group, education and sector.

However, the results challenge the assumptions of welfare state paradox concerning the highly skilled women: by the 2013 upper white-collar women have attained the same level of job quality as their male counterparts. More specifically, the hypothesis on the comparative disadvantage of higher skilled women did hold true earlier in 1977 but not in 2013. Instead, by 2013 upper white-collar women attained the same level of job quality in terms of possibilities to use and develop skills at work, work autonomy and job insecurity as their male counterparts. In terms of pressures, upper-white collar women have exceeded the level of their male counterparts. (article IV.) The results suggest that Nordic female employees in highly skilled, high quality positions are not necessarily as disadvantaged in terms of the job quality and career attainment as the theory led us assume.

Although previous studies on intersecting inequality in job quality is scarce, in broader terms the results are in line with the critique formulated by Korpi et al. (2013) and Hegewisch & Gornick (2011), who argue that fears of adverse effects of egalitarian policies on highly skilled women in work life might be overstated. It is possible that the women in upper white-collar occupations in Nordic countries also invest in their careers, have shorter career interruptions and less often engage in part-time work which enhances the likelyhood of accessing and remaining in high quality employment. Earlier research established that in families where the mother is more educated, the fathers take more parental leave (for Sweden Sundström & Dufvander 2002; for Finland Saarikallio-Torp & Haataja 2016) and more educated fathers do more household work and childcare (Pääkkönen & Hanifi 2011). Consequently, it is also likely that care responsibilities are more gender equally divided in families of highly educated mothers, enabling these mothers to engage in work life.

The results in the leading study also call for further research taking into account intersectional perspectives that consider the interactions between class and gender. Results that do not correspond to the welfare state paradox expectations concerning the wide gap between high skilled men and women also require further investigation. Consequently, the earlier studies that found support for welfare state paradox should be replicated with up-to-data to see if these relationships have changed. In addition, more research is needed to evaluate whether these detected patters are specifically Nordic (and thus relate to the particular institutional framework and welfare state policies), or whether the pattern of interaction between class and gender with respect to job quality is universal. Also would the results be different if gender gap in job quality would be studied in more refined occupational groups, among managers and professionals separately? These findings together with earlier research further call attention to study the effect of various welfare and family policies separately on the careers and work-related outcomes of women at different class positions: for instance, is leave generosity equally damaging to low and high skilled womens employment outcomes.

5.4 Globalization in action: call centre work and institutional fragmentation

The answer to the final research question on "Are there sector or industry specific dynamics which might threaten quality of jobs as well as the institutions protecting job quality?" is sought from an article that looks into the wellbeing of call centre workers (article V). The original article highlighted the low quality of call centre jobs in a highly regimented work environment. Relying on establishment level data and managerial interviews, we aimed to explain the low job quality in call centres using tools provided by labour process analysis on organisational policies and managerial strategies that create a highly pressured work environment that inhibits the well-being of employees (article V).

However, placing these results in the wider framework of this dissertation, and on the nexus of universal and institutional theories the research is founded upon, the most interesting contribution does not lie in the managerial strategies impacts on service sector and call centre jobs' variation of quality of jobs within a country or even within a sector due to. Rather, the most interesting contribution lies in the ways in which call centre work – and the sectoral and managerial logics it embodies – epitomise globalisation in action.

Inspired by the recent critique Vidal and Hauptmeier (2014) concerning the limitations of research departing from institutional theories as well as from LPT, I aim to build a bridge between these distinct research traditions. Whereas labour process analysis often concentrates on local processes and increases our understanding on the relationships between labour and capital, institutional

theory focuses on macro level determinants on job quality. The case of call centre work in Finland is used to enrich our understanding of job quality outcomes at least in two ways: First, it introduces the sector as a factor affecting quality of jobs and as a mediator of national and corporate influences. Second, narrowing down the focus within a given country to a particular sector makes it more possible to identify sources of variation within a country, thus highlighting the role of employer strategies within a set of institutions. Meso analysis shifts the research terrain from a model where cross national variations in job outcomes primarily reflect the role of national institutions, to a model where corporate strategies vary within countries and even within sectors in ways that are meaningful for understanding the variation in job quality outcomes (Carré & Tilly 2012). Also, by placing the observations on the Finnish service sector and call centre work in the framework provided by institutional theory, the objective is to describe how processes on the local level may contribute to processes of change on the macro level. In doing so, my intention is to take into account critiques faced by institutional theories that fail to recognise the mutability of institutions.

The driving forces behind the expansion of globalisation are seen to be rationalism, capitalism, technology and regulation (e.g. Scholte 2005). According to Edgell (2012) call centres epitomise contemporary globalisation in three ways: First, the transfer of work from one country to another, known as offshore outsourcing, is made possible by advances in information and communication technologies. Second and third, this technological capability enables the work to transcend time and space as if geographical distances did not exist. I adopt Edgell's idea on call centres as epitomising globalisation but I reformulate the thesis and place it within the framework of institutional theories. I argue that call centres epitomise contemporary globalisation even more crucially through the multiple ways their functioning logics combine rationalism and technology in a way that the production model itself is transportable and adaptable to various local contexts. Consequently, it may be argued that these benchmarked and imported business models interact with the surrounding institutional framework by contributing to institutional fragmentation by participating in deregulation of institutions and labour markets.

More specifically, the results of the original article V suggest how compared with more traditional services represented by banking and insurance, retail and care work, call centre employees report fewer opportunities to influence their jobs, lower task variety and reduce pressures. Findings are in line with much of the earlier research relying on comparative settings looking into variation in job quality in call centres and other clerical jobs (e.g. Grebner et al. 2003; Taylor et al. 2003; Zapf et al. 2003). It was also evident that employees in call centres had lower levels of positive well-being (measured in terms of work engagement) compared to employees in other service sector organisations. The analysis was based on Quality on life in a changing Europe survey data from 2007. The survey was complemented with establishment level information

collected from the organisation combined with interviews conducted with both managers and supervisors of the call centres.

The focus, guided by labour process analysis on employee autonomy and managerial control, makes it possible to see how managerial strategies lead to loss of personal discretion, simplified, repetitive tasks, work intensification and increased job insecurity. The findings described in article V reinforce the picture of call centres as sector of employment based on benchmarking of an international business model based on extensive use of technology, also in Finland. The call centres under study operated in a fiercely competitive in telecommunications industry and rapidly changing market. Call centres were found to apply identical managerial strategies described in international research literature that aim at seeking competitive edge through cost reductions. For instance, the massive The Global Call Center (GCC) project including 477 call centres in 16 countries identified several common technologies and managerial strategies used throughout the call centre sector both in developed and emerging economies: automatic call distribution and electronic monitoring systems enabling the collection of performance metrics (such as call handling time, wrap-up time, the number of calls per employee per day, and adherence to scripted texts) were reported in GCC documents (e.g. Batt, Holman & Holtgrewe 2009). All of the mentioned technologies and managerial strategies were found in the Finnish call centres studied (article V; see also Mustosmäki & Anttila 2012).

Our analysis revealed how teams were used more for administrative and controlling purposes to create competition and peer pressure both within and between teams, compared to actual teamwork in the sense of sharing tasks or working together, which is corroborated in international literature (Bain et al. 2002; Townsend 2005; Callaghan & Thompson 2001; Winiecki & Wigman 2007),. In addition, attempts were made to offset high pressures laid by both management and customers by creating a team spirit and having fun, as proposed in the other studies (e.g. Kinnie et al. 2000). The mentioned strategies are seen as de-skilling jobs, as they are used to fragment and simplify tasks and limit the personal discretion afforded to the employee.

We found widespread use of several segmentation and externalisation techniques identified in literature regarding the organisational structures and HR strategies. The call centres under study were organised into specialised divisions such as technical support, sales, billing, and customer queries. Divisions also followed the customer base (mass market, company customers) which further specialised the tasks related to a job (article V). This type of organisation of work has also been reported in call centres in telecommunication in US and connected to the differentiation of jobs in terms pay as well as in terms of possibilities to use skills and exercise personal discretion (e.g. Batt 2000, 2001). In other words, jobs may be divided according to value added to them: jobs related to technical knowledge or serving business segments may offer higher pay and skills.

The call centres studied were spread across the country, also to more remote areas in search of labour force. Call centres reported that they faced recruiting problems "due to the image issues", as they were largely seen as offering low status, low pay jobs. In the search for staff and flexibility, call centres used temporary agency personnel (26% of the staff at the time of data collection). In search of the labour force, the management also reached out to students and other young people. HR problems, such as employee absences and high turnover were also accepted as call centre jobs were not necessarily considered as career jobs even in managerial statements (article V). Similar statements are found in their international counterparts (e.g. Deery et al. 2010; Mulholland 2004; Kinnie et al. 2000). Also, other ways of using more vulnerable labour force segments such as employees from secondary labour market in Finland has been reported. Employment contracts in call centres have been hidden into internships for unemployed and young or into probation periods. In other words, call centre employees have officially been unemployed and receiving unemployment benefits or their employment has otherwise been publicly subsidised. (Koivunen 2011.)

Creating specialised units dedicated to particular products, services, or customer segments may also be understood in light of research on lengthening service value chains and their consequences for employees as well as institutional framework (see e.g. Haidinger et al. 2014). Strategies of segmentation such as creating specialised units, or using temporary agency workers could be interpreted as a strategy to seek competitive advantage by avoiding the institutional anchors of job quality. In the service industries, the tendency of organisations is to reduce their costs by externalising non-core business activities to special divisions or to other companies that operate more cheaply by offering lower job security, less fulltime work, more flexible working times and lower wages (e.g. Kirov & Ramioul 2014). For instance, segmented and specialised units of service provision are also often easier to sub-contract or outsource and thus further escape traditional sectoral legacies of their "home" organizations. Our call centre data did not include any subcontractors or outsourced units, yet according to interviews with the managers, the company and its call centres had a history of going back and forth with decisions relating to in-house and outsourced service provision.

Nevertheless, it is possible to argue that moving jobs from a well-organised core, the large telecommunications company to a more poorly organised periphery of a separate units (or firms) that have no or less favourable collective agreements (negotiated by different unions) is a form of by-passing regulations. By by-passing employment protection by outsourcing or making recourse to labour not covered by the original sectoral employment regulations, companies seek answers to what they see as increasing demands for flexibility and heated competition. All the above mentioned managerial strategies – service standardisation, use of technology for measurement of employee output and as well as the reported HR practices – may be executed under the label of rationalisation.

Call centre work epitomises globalisation on all levels and exemplifies the possibility to introduce 'global' type of work organisation, standardisation, managerial control and 'teams without teamwork' in the labour market traditionally characterised as Nordic work life model. It may be argued that these local processes are very similar as those detected in international literature and as such, may be interpreted as pointing towards increasing convergence between countries. In addition, the results require attention to institutional change and how these processes detected on the local level fragment employment relations and destabilise national and sectoral regime distinctiveness.

Having relatively strong unions, more trust-based relations and supportive institutional arrangements at the aggregate level does not mean that their influences and effects are distributed evenly across a country (see Lloyd & Payne 2013). Also, previous research suggests firms may have more leeway to guide their actions as the theory on national employment systems usually assumes. Sectoral challenges have an influence on actions of employers and firms while sectoral peculiarities (such as the terms of competition) provoke certain strategies by companies. In addition, exigencies of the markets lead to institutional avoidance and if cultivated, the ensuing governance mode becomes a viable alternative to the national 'corset'. (Crouch, Schröder & Voelzkow 2009.)

6 CONCLUSION

This study evaluates the existence and persistence of the Nordic working life model, approached through the multidimensional concept of job quality and measured using working conditions surveys. The main contribution of this doctoral study is that it provides multifaceted approach to Nordic exceptionalism. Analysing job quality from various angles, such as job quality trends in a comparative perspective, trends in gender and class inequality as well as industry-specific dynamics, have provided a more comprehensive portrait on Nordic exceptionalism than done in previous studies. The main findings are summarised in Table 4 below.

Foremost, in line with the institutional theories, especially that of employment regimes (e.g. Gallie 2003, 2007a, 2013), the results speak in favour of the existence of the Nordic working life model in the form of distinctive employment outcomes. This is qualified by the analysis of developments on job quality indicators during the past decades. The Nordic countries stood out as an only country group where employees' possibilities to influence their work and use and develop skills were high and continued to increase. Meanwhile in liberal countries employees reported deterioration in terms of intrinsic quality of jobs.

Second line of argument that provides further support for the Nordic exceptionalism, are results concerning declining class inequality. In other words, this study did not support the universal theory on increasing polarisation and inequality between higher and lower skilled workers. In fact, the study found that the conditions of blue collar workers are improving while the job quality of the higher skilled has declined in Finland. The results may be interpreted as representing inclusiveness of the Nordic employment regime, especially reinforcing the idea that institutional framework in Nordic countries has capacity to produce positive outcomes across the workforce, especially among the lower skilled. (see e.g. Appelbaum 2010, Gallie 2007a; Korpi 2006).

Third, the findings of this study revealed that gender gap in job quality was higher in Nordic countries compared to other European regimes and thus provide support for assumptions on the adverse effects of generous welfare

state for womens' occupational achievements. However, the results of this study reveal a declining gender gap in job quality across regimes under study, also in Nordic countries. In addition, the gender gap in job quality between Finnish upper white collar men and women had disappeared, challenging assumptions concerning the comparative disadvantage of highly skilled women in the Nordic labour market. These results suggest, in line with earlier critics (e.g. Korpi, Ferranini & Englund 2013, Hegewisch & Gornick 2012), that the claims of the gendered VoC theory and the welfare state paradox might be somewhat overstated, especially regarding the adverse effects for the highly skilled.

Fourth, according to the results, employees in the Nordic countries have experienced notable intensification of work as well as increasing job insecurity. Also the degrading job quality of upper white collar male employees is a result which points towards changing structures and conditions of employment. The findings suggest that changes are taking place in work places and most likely through managerial strategies moulding the organisation of work.

The results revealed comparatively low job quality in call centres compared to more traditional sectors of employment within the services. These low quality call centre jobs were understood as a result of managerial practices that reflect the logics of rationalisation and the introduction of technology that has been interpreted as shirking regulations that protect workers. In addition, the sectoral logics, managerial strategies and consequent low quality jobs in call centres may be interpreted as an example of new service industries where the strengths of traditional institutional anchors is weak. These local processes epitomise 'globalisation in action' by demonstrating mechanisms which feed back to the wider political economy and consequently might lead to institutional fragmentation.

TABLE 3 Summary of results

Research question(s)	**Main results**
Are Nordic countries different? Have Nordic countries managed to maintain high job quality despite various pressures for change?	The main results broadly support institutional theories: Nordic countries stood out as the only country group where *the intrinsic quality remained on a high level and continued to increase,* and job insecurity in Nordic countries in 2005 is at a comparatively low level due to a decline in the incidence of non-standard contracts 1995-2005. Yet, the results concerning the intensification of work run counter to the institutional theories, as work effort in Nordic countries increased and remained on comparatively high levels whereas decline was reported in liberal countries.
Is job quality polarising? More specifically, is inequality rising between employees in different class positions?	Results are in line with institutional theory on Nordic difference, which suggest declining class inequality. The results propose *an increase in class equality among employees in the Nordic regime,* in terms of possibilities to use and develop skills and use discretion at work (due to declines experienced by upper white collar men and improvements by manual employees), as well as with regard to intensification and subjective insecurity as the white collars are increasingly affected.
Are women disadvantaged in the Nordic labour market in terms of job quality when compared to other European employment regimes? Is gender inequality in job quality higher among the higher educated Nordic employees as the institutional theory postulates?	The results partly support, partly challenge the assumptions on the welfare state paradox: Although gender gap in job quality has narrowed in every regime during 1995-2005, *women in Nordic countries still seem comparatively disadvantaged* compared to women in the labour market in other regimes, except in terms of cognitive job content. Gender gap seems somewhat more persistent among blue and lower white-collar employees, yet comparative disadvantage of highly skilled women in the Nordic employment regime does not gain support: *upper white collar women attained the same level of job quality by 2013 as their male counterparts.*
Are there sector or industry specific dynamics which might threaten quality of jobs as well as the institutions protecting job quality?	The results reveal comparatively low job quality in call centres due to managerial practices that reflect the logics of rationalisation and the introduction of technology that has been interpreted as shirking regulations that protect workers. These local processes epitomise 'globalisation in action' by demonstrating mechanisms which might lead to institutional fragmentation.

Evaluation of the study

As presented in the introduction, this research process has been marked by adding additional layers to the main research problem of Nordic exceptionalism and its persistence in face of pressures for change.

Particularly this study highlights the benefits of trend analysis (compared to cross-sectional analysis) and the meaning of examining job quality among various groups of employees, 'below the national level of indexes and averages'. For instance, earlier comparative research based on cross-sectional dataset and measuring job quality differences on country level of averages, has concluded that countries representing a liberal and nonregulated labour market score fairly close to Nordic countries in job quality comparisons, suggesting there is no single road to success (e.g. Davoine et al. 2008). However, results of this study suggest that Nordic and liberal countries contrast both in terms of trends as well as class polarisation. Consequently, conclusions made on the success of national model based on these results would be rather different. This notion has both implications for further studies as well as designing indicators for policy purposes.

While this study has concentrated on describing Nordic exceptionalism based on institutional theories, it has not been able to empirically test the relationships between institutions and job quality outcomes (compared with e.g. Esser & Olsen 2012). However, recent research has pointed out how the effects of labour market policies and related institutions on work life change and job polarisation are challenging to test empirically (e.g. Eurofound 2014). These challenges largely pertain to difficulties in lack of suitable data to describing and measuring those institutions.

Relying solely on ready-made survey data is however an inherent limitation of the study. Surveys are not often regarded the best data for uncovering deep currents of change – for these purposes surveys need to be used in a complementary way with ethnographic, case study and other qualitative enquiries in order to improve the study's ability to answer why something happened (Green 2006, 4.) Statistics and survey questions used to study trends are the ones that have kept intact in questionnaires to allow follow up. Consequently they are inevitably founded on the concepts of the past. It is also possible that datasets do not extend far enough to grasp what is "old" and "new" (e.g. Julkunen 2008). Analytical strategies in survey research rely on aggregate averages on questions formulated in the 1970's or 1990's with answer categories aiming at objectivity and relative undisturbed by cultural bias, might make it challenging to detect what is new.

Similarly as survey methods, institutional theories are accused of not being able to detect change. To better understand the pressures of change for the Nordic working life regime, and to develop a finer-grained understanding of variation in employment outcomes and institutional change, this research has aimed at recognising these limitations through the appreciation of segmentation processes within countries (e.g. Crouch et al. 2009; Grimshaw & Lehndorff 2010). Consequently, the study aims at bridging these two rather distict theoretical traditions. However, all the interpretations are to be made cautiously, keeping in

mind that the tools provided by the chosen methodology and theoretical framework may restrict what can be found.

Future challenges for the Nordic Working Life Model

The current government in Finland is the first one in 20 years whose program does not include any direct goal on improving quality of work life (Alasoini 2016b) nor on gender equality (Ratkaisujen Suomi 2015). Nordic welfare state as a concept has also disappeared from government programs (Hellmann, Monni & Alanko 2017). As mentioned in the introduction, policy documents have recently emphasised the necessity of 'structural reforms' and 'removing obstacles from employment and labour reallocation, increasing wage flexibility and improving incentives to make work pay'. The current government is determined in creating a "productivity leap" by concentrating on "new pact" between the major labor market partners. This new pact, in practice, is about deregulation such as moving from collective agreements to local negotiations and reforms such as increasing working time and reducing employees' benefits.

There are also other signs of shifting power balance in the Finnish labour market. March 2017 Confederation of Finnish industries (EK) announced unilaterally that it will not conduct any further national level labour market agreements. The 22 agreements to be jettisoned cover several practical issues like collecting trade union fees, provisions on employee training and the rights of shop stewards. All future agreements will we be made at union or company level, EK has decided. EK had earlier pulled out of confederation level national tripartite labour market pacts. The withdrawal has been condemned as eroding the decision-making culture of Finland.

It seems that neoliberal tendencies and globalization has either destroyed or shaked the foundations of collaborative labour relations -foundations of the welfare state- leading towards more hegemonic primacy of the management and shareholder perspective (e.g. Kettunen 2012). Trade unions, collective agreements and labor legislation are fallen into the unfortunate role of becoming barriers to raising employment levels, innovation and productivity –even if vast research evidence emphasizes the success of the Nordic model.

This study has further highlighted how the mechanisms that fragment Nordic institutional framework might also take place within organisations through managerial strategies. As answers to what companies see as increasing demands for flexibility and heated competition, employers may also deliberately seek strategies that may be classified as 'by-passing of institutional anchors' by lengthening of the service chains or making recourse to labour not covered by original sectoral employment regulations. Shedding light to those fragments in further research and public discussion is vital in order to recognize the future challenges of the Nordic working life regime. If these strategies of institutional avoidance become the 'new norm', they would destabilise and fragment the institutions, and erode the foundations of the Nordic working life model.

YHTEENVETO (FINNISH SUMMARY)

Julkisessa keskustelussa ja aiemmassa tutkimuksessa, työelämän muutos käsitetään usein kohtalonomaiseksi ja vääjäämättömäksi. Muutoksien oletetaan olevan kaikkialla samankaltaisia, universaaleja. Globalisaation, teknologian kehityksen, taloudellisen kilpailun lisääntymisen sekä johtamismenetelmien yhdenmukaistumisen on ajateltu heikentävän työelämän laatua, johtavan epävarmuuden lisääntymiseen ja työntekijöiden autonomian heikkenemiseen. Työmarkkinoiden myös oletetaan yleisesti jakautuvan hyviin ja huonoihin töihin.

Tämä artikkeliväitöskirja käsittelee Pohjoismaisen työelämän laadun erityisyyttä ja työelämän muutosta vertailevasta näkökulmasta, institutionaalisen teorian valossa. Toisin kuin universaalit teoriat, institutionaaliset teoriat olettavat maiden eroavan toisistaan työelämän laadun suhteen, sillä samankaltaisilla muutospaineilla voi olla erilaisia seurauksia maiden poliittisista, kulttuurisista, historiallisista ja institutionaalisista eroista johtuen. Erityisesti Pohjoismainen malli sisältää rakenteita ja instituutioita, joiden oletetaan tuottavan hyvää työelämää. Instituutiot myös suodattavat globalisaation ja teknologian muutoksen kielteisiä vaikutuksia työelämän laadulle sekä hillitsevät polarisaatioriskejä. Pohjoismaita pidetään myös sukupuolten tasa-arvon mallimaana. Julkiset palvelut ja laajat työn ja perheen yhdistämistä helpottavat hyvinvointivaltion politiikat helpottavat naisten osallistumista työmarkkinoille. Institutionaalinen teoria kuitenkin esittää pohjoismaisen mallin perhepolitiikan olevan itse asiassa ongelmallinen naisille työelämässä: segregoituneista työmarkkinoista ja perhevapaista johtuen naisten olisi vaikeampi päästä kiinni hyviin (yksityisen sektorin) työpaikkoihin, johtaviin asemiin ja kiinni korkeisiin palkkoihin. Tätä mekanismia on kutsuttu kirjallisuudessa naisystävällisen hyvinvointivaltion paradoksiksi.

Pohjoismaisen mallin kestävyyttä ei kuitenkaan voi pitää itsestäänselvyytenä, sillä työelämää sääteleviin instituutioihin kohdistuu merkittäviä muutospaineita. Institutionaalisen teorian kriitikot ovat esittäneet, ettei kyseisen viitekehyksen ohjaama tutkimus onnistu havaitsemaan muutosta. Teoria siis antaisi staattisen ja yhtenäisen kuvan instituutioiden kattavasta ja suojaavasta vaikutuksesta. Teoriaa tulisi kehittää tunnistamaan myös sitä miten institutionaaliset ankkurit eivät tavoita eri alojen työntekijöitä yhtäläisesti ja miten institutionaalista kehystä vältellään.

Näiden teoriakeskustelujen muodostamien jännitteiden valossa tässä tutkimuksessa arvioidaan Pohjoismaiden erityisyyttä ja tarkastellaan työelämän laadun muutoksia työntekijöiden näkökulmasta. Työelämän laatu on sateenvarjokäsite, joka kokoaa alleen työntekijöiden arviot kehittämis- ja vaikutusmahdollisuuksista, työn kiireisyydestä ja työn epävarmuudesta. Analyyseissa hyödynnetään kolmea laajaa työoloja kartoittavaa kyselyaineistoa. Eurooppalaisen työoloaineistojen 1995, 2000, 2005 ja 2010 avulla vertaillaan Pohjoismaisen työelämän laadun kehitystä suhteessa muihin Euroopan maihin (artikkelit I, II, III). Työelämän laadun polarisoitumista, siis työntekijäryhmien välisten erojen muutosta, tarkastellaan Tilastokeskuksen työoloaineistoihin 1977–2013 tukeutuen (artikkeli IV). Kysymystä verrattain suuresta ja pysyvästä sukupuolten välisestä erosta

Pohjoismaissa, erityisesti korkeakoulutettujen näkökulmasta, tarkastellaan Eurooppalaisten työoloaineistojen 1995, 2000 ja 2005 (artikkeli III) sekä Tilastokeskuksen työoloaineistoihin 1977–2013 tukeutuen (artikkeli IV). Työelämän laadun eriytymistä eri sektoreiden välillä tarkastellaan Quality of Life in a Changing Europe 2007 -aineiston (artikkeli V) avulla.

Tulokset osoittavat, että Pohjoismaat muodostavat erityisen, korkean työelämän laadun ryhmän. Maiden välisen vertailun mukaan Pohjoismaisilla työntekijöillä on hyvät mahdollisuudet kehittää ja käyttää ammattitaitoaan sekä vaikuttaa työn tekemisen tapoihin. Muutosanalyysit osoittavat, että Pohjoismaat ovat ainut maaryhmä missä työelämän laatu on pysynyt korkealla tasolla. Monessa muussa maassa, esimerkiksi liberaalia mallia edustavassa Iso-Britanniassa, havaitaan työelämän laadun rapautumista. Lisäksi tarkastelut työelämän laadun muutoksesta eri ammattiasemien mukaan tukevat institutionaalisen teorian oletuksia Pohjoismaiden erityisyydestä. Anglosaksisten työelämäkeskusteluiden ja tutkimuksien piirtämät polarisaatioriskit eivät ole toteutuneet Suomessa. Ylemmissä ja alemmissa ammattiasemassa olevien väliset erot työelämän laadun mittareilla ovat päinvastoin pienentyneet Suomessa 1977–2013. Työntekijäasemassa olevat ovat ottaneet kiinni toimihenkilö- ja asiantuntija-ammateissa toimivia kehittymis- ja vaikuttamismahdollisuuksien suhteen.

Tarinaan Pohjoismaista työelämän laadun mallimaina kuitenkin muodostuu varjoja: työn kiireisyys ja koettu työn epävarmuus ovat lisääntyneet merkittävästi Suomessa. Samalla näistä kielteisistä kehityssuunnista on tullut yhtäläisesti eri asemassa olevia työntekijöitä koskettavia ongelmia. Tutkittaessa sukupuolten välisiä eroja Euroopassa, havaitaan että erot työelämän laadun mittareilla ovat kaventuneet kaikissa maaryhmissä. Pohjoismaissa ero naisten ja miesten välillä työelämän laadussa on kuitenkin suurin. Kun tarkastelua laajennetaan eri ammattiasemassa oleviin miehiin ja naisiin havaitaan, että erot ovat melko suuria ja pysyviä erityisesti alempien toimihenkilöiden ja työntekijäasemassa olevien miesten ja naisten välillä. Nämä tulokset tukevat oletuksia Pohjoismaisen naisystävällisen hyvinvointivaltion paradoksaalisuudesta. Sen sijaan tukea eivät saa oletukset korkeakoulutettujen naisten vaikeuksista päästä hyviin työpaikkoihin: siinä missä ero ylempien toimihenkilömiesten ja naisten kohdalla oli huomattava 1970-luvulla, 2010-luvulle tultaessa ylemmät toimihenkilönaiset ovat saavuttaneet miehet työn kehittämis- ja vaikutusmahdollisuuksien suhteen, sekä kiireen ja epävarmuuden suhteen.

Tulokset antavat viitteitä myös siitä, ettei Pohjoismainen institutionaalinen kehys välttämättä suojele yhtäläisesti vanhojen ja uusien nopeasti syntyvien alojen työntekijöitä. Kansainvälisessä kirjallisuudessa puhelinpalvelukeskukset ovat usein esitetty esimerkki globaalin, rajat ylittävästä tietoteknologiaa hyödyntävän työn organisoinnin mallista, jota on pidetty työelämän laadun kannalta ongelmallisena. Myös tämän tutkimuksen valossa verrattaessa perinteisempiin hoitoalan, vähittäiskaupan ja pankki- ja sijoitusalan työntekijöihin, puhelinpalvelukeskusten työntekijät kokivat enemmän kiirettä ja heillä oli vähemmän mahdollisuuksia vaikuttaa työn tekemisen tapaan, sisältöihin, sekä vähäisemmät mahdollisuudet käyttää luovuutta työssään. Kun huomio käännetään työnantajien

toimintaan, erityisesti siihen tapaan miten työtä eri tavoin uudelleen järjestetään institutionaalisen kehyksen reunamille ja ulkopuolelle, asettuu myös Pohjoismaisen mallin kestävyys uuteen valoon. Vaikka jonkin alan tai sektorin uusi, erityinen työn organisoinnin tapa voi näyttäytyä paikallisena ratkaisuna, paikalliset prosessit ja käytännöt laajetessaan horjuttavat ja murentavat Pohjoismaista hyvää työelämää tuottavaa ja eriarvoistumista hillitsevää mallia.

Tämän tutkimuksen merkittävin anti poliittiselle ja julkiselle keskustelulle onkin huomion kiinnittäminen institutionaalisen kehyksen merkittävyyteen Pohjoismaisen työelämän laadun ja sukupuolten tasa-arvon kannalta sekä siihen miten työmarkkinat jakautuvat hyviin ja huonoihin töihin. Merkityksellistä on, nähdäänkö työelämän muutos ja työn tulevaisuus deterministisenä vai sellaisena, johon voidaan poliittisin ja sopimuksellisin keinoin vaikuttaa.

Tutkimus tuo myös esiin, ettei sukupuolten tasa-arvo työelämässä ole vielä saavutettu Pohjoismaissa ja että naisystävälliseksi mielletyillä politiikoilla voi olla epäsuotuisia seurauksia naisille itselleen. Työ- ja perhepolitiikan vaikutuksia tulisikin tarkastella huomioiden eri sosio-ekonomisessa olevien työntekijöiden kannalta. Jatkossa tutkimuksen tulisi keskittyä kriittisesti tarkastelemaan väitettä pohjoismaisen hyvinvointivaltion naisystävällisyydestä eri näkökulmista.

Tämä tutkimus ei kuitenkaan ole vain kiinnittänyt huomiota instituutioiden merkitykseen hyvää työelämää tuottavana tekijänä. Teorian tarjoamaa viitekehystä voidaan hyödyntää myös tarkastelemaan sitä miten institutionaaliset ankkurit eivät tavoita kaikkien alojen työntekijöitä yhtäläisesti tai miten institutionaalista kehystä kierretään. Näiden prosessien tarkastelu avaa myös uusia kiinnostavia näkökulmia Pohjoismaisen mallin ja sen haasteiden tutkimukseen.

REFERENCES

Anttila, T., Oinas, T., Tammelin, M. & Nätti, J. 2015. Working-Time Regimes and Work-Life Balance in Europe. European Sociological Review 31 (6), 713-724. doi: 10.1093/esr/jcv070

Abendroth, A-K., Maas, I. & van der Lippe. 2013. Human capital and the Gender Gap in Authority in European Countries. European Sociological Review 29 (2), 261 -273.

Anxo, D., & O'Reilly, J. 2000. Working time regimes and transitions in comparative perspective. In: O'Reilly, J., Cebrian, I., & Lallement, M. (eds.) Working time changes: Social integration through transitional labour markets. Cheltenham UK and Northampton, US: Edward Elgar, 61-90.

Anxo, D., Boulin, J-Y., Fagan, C., Cebrián, I., Keuzenkamp, S., Klammer, U., Klenner, C., Moreno, G., & Toharía, L. 2006. Working time options over the life course: new work patterns and company strategies. European Foundation for the Improvement of Living and Working Conditions: Luxembourg.

Alasoini, T. 2016a. Workplace Development Programmes as Institutional Entrepreneurs: Why They Produce Change and Why They Do Not. Aalto University publication series: Doctoral dissertations. 12/2016.

Alasoini, T., 2016b. Hallituksen työelämäreformi ja hyvä työelämän laatu. (Government employment reform and high quality of work life) Talous ja yhteiskunta 1/2016, 18–22.

Alvarez-Galván, J.-L. 2012. Good or bad jobs? Contrasting Worker's expectations and jobs in Mexican call centres. In: Warhurst, C. & al. (eds.) Are bad jobs inevitable? Palgrave Macmillan, 160-175.

Allmendinger, J., Hipp, L. & Stuth, S. 2013. Atypical employment in Europe 1996-2011, WZB Discussion Paper.

Antón, J-I., Fernández-Macías, F., & Muñoz de Bustillo, R. 2012. Identifying Bad Jobs across Europe. In: Warhurst, C., Findlay, P. Tilly, C., & Carré, F. (eds.) Are bad jobs inevitable? Palgrave Macmillan, 25-44.

Appelbaum, E. 2010. Institutions, Firms, and the Quality of Jobs in Low-Wage Labor Markets. In: Gautié, J. & Schmitt, J. Low-wage work in a wealthy world. Russell Sage, New York, 185-210.

Arnkil, R., Rissanen, P., Pitkänen, S., Piirainen, T., Koski, P., Berg, P. and Vartiainen, M. 2003. The Finnish Workplace Development Programme – A Small Giant? Evaluation Report. Ministry of Labour, Finland.

Arnkil, R. 2004. The Finnish workplace development programme: A small giant? Concepts and Transformation 9 (3), 249-278,

Askenazy, P., Berry, J.-B., Carré, F., Prunier-Poulmaire, S. & Tilly, C. 2012. Working in large food retailers in France and the USA: the key role of institutions Work, Employment & Society 26 (4), 588-60.

Bain, P., Watson, A., Mulvey, G., Taylor, P. & Gall, G. 2002. Taylorism, Targets and the Pursuit of Quantity and Quality by Call Centre Management. New Technology, Work and Employment 17 (3), 154–69.

Batt, R. 2001. Explaining wage inequality in telecommunications services: customer segmentation, human resource practices, and union decline. Industrial lbaour relations review 54 (2), 425-449.

Batt, R. 2000. Strategic segmentation in front-line services: matching customers, employees and human resource systems. International Journal of Human Resource Management, 11 (3), 540-561.

Batt, R., Holman, D. & Holtgrewe, U. 2009. The Globalization of Service Work: Comparative Institutional Perspectives on Call Centers Introduction to a Special Issue of the Industrial & Labor Relations Review Industrial & Labor Relations Review 62 (4), 453-488.

Barbier, J-C. 2012. Tracing the fate of EU "social policy": Changes in the political discourse from the "Lisbon Strategy" to "Europe 2020". International labour review 151(4), 377-399.

Beham, B. et al. 2011. Job Demands and Work-Home Interference: Empirical Evidence from Service Sector Employees in Eight European Countries. In: Drobnič, S. & Guillén, AM. (eds.), Work-life balance in Europe: The role of job quality. 2011, Basingstoke: Palgrave Macmillan., 95-119.

Berglund, T., Furåker, B., & Vulkan, P. 2014. Is job insecurity compensated for by employment and income security? Economic and Industrial Democracy 35 (1), 165-184.

Bekker, S. 2011. Flexicurity: Explaining the development of a European concept. Doctoral dissertation. Universiteit van Tilburg.

Bell, D. 1974. The Coming of Post-Industrial Society. New York: Harper Colophon Books.

Blauner, R. 1964. Alienation and freedom: factory work and his industry. Oxrodr, England. Chigaco Press.

Blomquist, B., Engström. T., Jonsson, D. and Medbo, L. 2013. Assembly Systems and Work in Swedish Automotive Industry. In: Sandberg, Å. (ed.) Nordic Lights. Work, Management and Welfare in Scandinavia. SNS. Förlag, 225-256.

Bosch, G., Rubery, J., & Lehndorff, S., 2007. European employment models under pressure to change. Transfer. International Labour Review 146 (3-4), 253-277.

Bothfeld, S. & Leschke, J. 2012. More and better jobs: is quality of work still an issue and was it ever? Transfer: European Review of Labour and Research 18 (3), 337-353

Braverman, H. 1998. [1974]. Labor and Monopoly Capital: The Degradation of Work in the Twentieth Century. New York: Monthly Review Press

Budd, J. W., & Spencer, D. A. 2015. Worker well-being and the importance of work: bridging the gap. European Journal of Industrial Relations 21 (2), 181-196.

Burchell 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

Burchell, B., Sehnbruch, K., Piasna, A. & Agloni, N. 2014. The quality of employment and decent work: definitions, methodologies and ongoing debates. Cambridge Journal of Economics 38, 459-477.

Brown, A., Charlwood, A. & Spencer, D.A. 2012. Not all that it might seem: why job satisfaction is worth studying despite it being a poor summary measure of job quality. Work, employment & Society 26 (6), 1007-1018.

Callaghan, G. & Thompson, P. 2001. Edwards revisited: Technical control and call centres. Economic and Industrial Democracy 22 (1), 13–37.

Carré, F. & Tilly, C. 2012. A Framework for International Comparative Analysis of the Determinants of Job Quality In: Warhurst, C., Findlay, P. Tilly, C., and Carré, F. (eds.) Are bad jobs inevitable? Palgrave Macmillan, 78-94.

Cherns, A.B. and Davis, L.E. 1975. Assessment of the State-of-Art. In: Davis, L.E. & Cherns, A.B. The quality of working life. Volume one: problems, prospects and the state of art. The Free Press. A Division of Macmillan Publishing Co., New York, 12-54.

Clark, A. 2005. Your Money or Your Life: Changing Job Quality in OECD Countries. British Journal of Industrial Relations 43 (3), 377-400.

Crouch, C., Schröder, M. & Voelzkow, H. 2009. Regional and sectoral varieties of capitalism. Economy and Society 38 (4), 654-678,

Cooke, G., Donaghey, J. & Zeytinoglu, I. 2013. The nuanced nature of work quality: Evidence from rural Newfoundland and Ireland. Human Relations 66 (4), 503-52.

Cooke, L. 2011. Gender-Class Equality in Political Economies. Abingdon: Routledge.

Cummings, E. & Molloy, E. 1977. Improving productivity and the quality of work life. Praeger, New York.

Crompton, R., & Jones, G. A. (1984). White-collar proletariat: Deskilling and gender in clerical work. Macmillan.

Dahl, S-Å., Nesheim, T., & Olsen, K. 2009. Quality of Work – Concept and Measurement. In: Guillén, A-M. & Dahl S.-Å. (eds.) Quality of Work in the European Union. Concepts, Data and Debates from a Transnational Perspective. Brussels: Peter Lang, 19-40.

Datta Gupta, N., Smith, N. & Verner, M. 2008. Perspective article: The Impact of Nordic countries' family friendly policies on employment, wages and children. Review of Economics of the Household 6 (65), 65-89.

Davoine, L., Ehrel, C. & Guergoat-Lariviere, M, 2008. Monitoring Quality in Work: European Employment Strategy Indicators and Beyond. International Labour Review 147 (2–3), 163–198.

Deery, S. Iverson, R. & Walsh, J. 2010. Coping Strategies in Call Centres: Work Intensity and the Role of Co-workers and Supervisors. British Journal of Industrial Relations 48 (1), 181–200.

Demerouti, E., Bakker, A.B., Nachreiner, F. & Schaufeli, W.B. 2001. The job demands-resources model of burnout, Journal of Applied Psychology 86, 499-512.

Diaz-Serrano, L. & Vieira, J. A. C. 2005. Low Pay, Higher Pay and Job Satisfaction within the European Union: Empirical Evidence from Fourteen Countries. IZA Discussion Paper No. 1558

Dieckhoff, M. & Gallie, D. 2007. The renewed Lisbon Strategy and social exclusion policy Industrial Relations Journal 38 (6), 480-502

Dieckhoff, M. Jungblut, J-M. & O'Connell, P. 2007. Job-related Training in Europe: Do Institutions Matter. In: Gallie, D. (ed.) Employment Regimes and the Quality of Work. Oxford: Oxford University Press, 77–103.

Dieckhoff, M. 2013. Continuing training in times of economic crisis. In: Gallie, D. (ed.) Economic Crisis, Quality of Work, and Social Integration: The European Experience, Oxford University Press, 88-114.

Dieckhoff, M., Gash, V. & Steiber, N. 2015. Measuring the effect of institutional change on gender inequality in the labour market. Research in Social Stratification and Mobility 39, 59-75.

Dickerson, A. and Green, F. 2012. Fears and realisations of employment insecurity. Labour Economics 19 (2), 198-210.

Doogan, K. 2001. Insecurity and Long-Term Employment. Work, Employment & Society 15 (3), 419–440.

Doogan, K. 2005. Long-Term Employment and the Restructuring of the Labour Market in Europe. Time & Society 14 (1), 65–87.

Doogan, K. 2009. New Capitalism? The Transformation of Work. Cambridge: Polity Press.

Doogan, K. 2015. Minority condition or Majority Experience? In: Porta, D., Hänninen, S., Siisiäinen, M. & Silvasti, T. (ed.) The New Social Division. Making and Unmaking Precariousness" Basingstoke: Palgrave Macmillan, 43-62.

Drobnič, S. & Guillén, AM. (eds.) 2011. Work-life balance in Europe: The role of job quality. 2011, Basingstoke: Palgrave Macmillan

Drobnič, S. & Guillén, AM. 2011. Introduction: Job quality and Work-life balance. In: Drobnič, S. & Guillén, AM. (eds.) Work-life balance in Europe: The role of job quality. 2011, Basingstoke: Palgrave Macmillan, 1-14.

Drobnič, S., Beham, B. & Präg, P. 2010. Good job, good life? Working conditions and quality of life in Europe. Social Indicators Research 99 (2), 205-225,

Duvander, A-S. & Johansson, M. 2012. What are the effects of reforms promoting fathers' parental leave use? Journal of European Social Policy 22(3), 319-330.

Dämmrich, J., & Blossfeld, H. P. 2016. Women's disadvantage in holding supervisory positions. Variations among European countries and the role of horizontal gender segregation. Acta Sociologica 0(0), DOI: 0001699316675022.

EC 2001. European Commission. Employment and social policies: a framework for investing in quality. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions, COM (2001) 313 final, 20 June 2001, Brussels.

EC 2005. European Commission 'Working Together for Growth and Jobs: A New Start for the Lisbon Strategy Communication to the Spring European Council', COM (2005) 24, Brussels.

EC 2007a. European Commission, Towards common principle of flexicurity: more and better jobs through flexibility and security. Luxembourg, Commission of the European Communities.

EC 2007b. European Commission. Employment in Europe 2007, Luxembourg, Commission of the European Communities.

Edgell, 2012. Sociology of work. Continuity and change in paid and unpaid work. Second edition. Sage publishing.

Edlund, J. & Grönlund, A. 2008. Protection of Mutual Interests? Employment Protection and Skill Formation in Different Labour Market Regimes. European Journal of Industrial Relations 14 (3), 245–264.

Edlund, J. & Grönlund, A. 2010. Class and Work Autonomy in 21 Countries A Question of Production Regime or Power Resources?. Acta Sociologica 53(3), 213-228.

Edlund, J. & Öun, I. 2016. Who should work and who should care? Attitudes towards the desirable division of labour between mothers and fathers in five European countries. Acta Sociologica 59 (2), 151–169.

Ellonen, N., & Nätti, J. 2015. Job insecurity and the unemployment rate: Micro- and macro-level predictors of perceived job insecurity among Finnish employees 1984–2008. Economic and Industrial Democracy 36 (1), 51-71.

Ellingsæter, A-L. 2013. Scandinavian welfare states and gender (de) segregation: Recent trends and processes. Economic and Industrial Democracy 34 (3), 501-518.

Elvander, N. 2002. The Labour Market Regimes in the Nordic Countries: A Comparative Analysis. Scandinavian Political Studies 25 (2), 117-137.

Emery, F.E. & Thorsrud, E. 1969. Form and Content of Industrial Democracy. London, Tavistock.

Emslie., C., Hunt, K. & Macintyre, S., 1999. Gender' or `Job' Differences? Working Conditions amongst Men and Women in White-Collar Occupations. Work, Employment & Society 13 (4), 711-729.

Erlinghagen, M. 2008. Self-perceived job insecurity and social context: A multi-level analysis of 17 European countries. European Sociological Review 24 (2), 183-197.

Esser, I. & Olsen, K. 2012. Perceived Job Quality: Autonomy and Job Security within a Multi-level Framework. European Sociological Review 28 (4), 443–454.

Estévez-Abe, M., Iversen, T. & Soskice, D. 2001. Social Protection and the Formation of Skills: A Re-Intepretation of the Welfare State. In: Hall, Peter & Soskice, David (eds.): Varieties of Capitalism. New York: Oxford University Press, pp. 145-183.

Estévez-Abe, M. 2005. Gender Bias in Skills and Social Policies: The Varieties of Capitalism Perspective on Sex Segregation. Social Politics: International Studies in Gender, State & Society 12 (2), 180-215

Estévez-Abe, M. 2009. Gender, Inequality, and Capitalism: The "Varieties of Capitalism" and Women. Social Politics: International Studies in Gender, State & Society 16 (2), 182-191.

Esping-Andersen, G. 1990. The Three Worlds of the Welfare capitalism. Oxford: Oxford University Press.

Esping-Andersen, G. 2009. Incomplete revolution: Adapting the Welfare states to women's new roles. Polity press.

Eurofound 2012. Trends in job quality in Europe, Publications Office of the European Union, Luxembourg.

Eurofound 2013a. Work organisation and employee involvement in Europe, Publications Office of the European Union, Luxembourg.

Eurofound 2013b. Employment polarisation and job quality in the crisis: European Jobs Monitor 2013. Dublin: Eurofound.

Eurofound 2014. Drivers of recent job polarisation and upgrading in Europe: European Jobs Monitor 2014, Publications Office of the European Union, Luxembourg.

Eurofound 2015a. Convergence and divergence of job quality in Europe 1995–2010, Publications Office of the European Union, Luxembourg.

Eurofound 2015b. New forms of employment, Publications Office of the European Union, Luxembourg.

Eurofound 2016. Sixth European Working Conditions Survey – Overview report, Publications Office of the European Union, Luxembourg.

Evertsson, M., England, P., Mooi-Reci, I., et al. 2009. Is gender inequality greater at lower or higher educational levels? Common patterns in the Netherlands, Sweden and the United States. Social Politics: International Studies in Gender, State & Society 16 (2), 210–210.

Feldsted A, Gallie D, Green F & Zhou Y. 2007. Skills at Work, 1986 to 2006. Oxford: ESRC Centre on Skills, Knowledge and Organisational Performance.

Felstead, A, Gallie, D, Green, F & Inanc, H. 2013a. Skills At Work In Britain: First Findings from the Skills and Employment Survey 2012, London: Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education.

Felstead, A, Gallie, D, Green, F & Inanc, H. 2013b. Work Intensification in Britain: First Findings from the Skills and Employment Survey 2012, London: Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute

Fernández-Macías, E., Hurley, J. and Storrie, D. 2012. Transformation of the Employment Structure in the EU and USA. 1995-2007. Basingstone: Palgrave Macmillan.

Fevre, R., 2007. Employment insecurity and social theory: the power of nightmares. Work, Employment & Society 21 (3), 517-535.

Findlay, P. Warhurst, Tilly, C. & Carré, F. 2012. Introduction 'Job Quality: Issues and Developments'. In: In: Warhurst, C. & al. (eds.) Are bad jobs inevitable? Pp. 160-175.

Flecker, J. & Meil, P. 2010. Organisational Restructuring and Emerging Service Sector Value Chains -Implications for Work and Employment. Work, Employment and Society 24 (4), 1-19.

Florida, R. 2002. The Rise of the Creative Class: and how its transforming work, leisure, community and everyday life. Basic books.

Gallie, D. 2002., The Quality of Working Life in Welfare Strategy. In: Esping-Andersen, G. (ed.) Why We Need a New Welfare State. Oxford: Oxford University Press.

Gallie, D., 2003. The Quality of Working Life: Is Scandinavia Different? European Sociological Review, 19 (1), 61–79.

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, Employment Regimes and the Quality of Work. In: Gallie D (ed.) Employment Regimes and the Quality of Work. New York: Oxford University Press, 1–33.

Gallie, D., 2007b. Task discretion and Job Quality. In: Gallie, D. (ed.) Employment Regimes and the Quality of Work. New York: Oxford University Press, 105-136.

Gallie, D. 2007c. Production regimes and the quality of employment in Europe. Annual Reviev of Sociology, 33, 85-104.

Gallie, D., 2007d. Welfare regimes, employment systems and job preference orientations. European Sociological Review 23(3), 279–293.

Gallie, D. 2011. Production Regimes, Employee Job Control and Skill Development. London. Centre for Learning and Life Chances in Knowledge Economies and Societies (LLAKES) Research paper 31, 2011.

Gallie, D. 2013. Economic crisis, the quality of work, and social integration: Issues and context. In: Gallie, D. (ed). Economic Crisis, Quality of Work, and Social Integration: The European Experience, Oxford: Oxford University Press, pp. 1-,

Gallie D (ed.) 2013. Economic crisis, quality of work & social integration: The European Experience. Oxford: Oxford University Press.

Gallie, D. & Zhou, Y. 2013. Job control, work intensity, and work stress. In: Gallie, D. (ed). Economic Crisis, Quality of Work, and Social Integration: The European Experience, Oxford: Oxford University Press, 115-141.

Gallie, D. 2015. Class Inequality at Work: Trends to Polarization? In: Felstead, A., Gallie, D. & Green, F. (eds.) Unequal Britain at work. Oxford university press, 22-41.

Gallie, D., Feldstead, A., & Green, F. 2004. Changing patterns of Task Discretion in Britain. Work, Employment & Society 18, 243–266.

Gallie, D. & Russell, H., 2009. Work-family conflict and working conditions in Western Europe. Social Indicators Research 93 (3), 445-467

Gallie, D., Felstead, A., Green, F. & Inanc, H. 2016. The hidden face of job insecurity Work, Employment & Society 0(0), Doi: 0950017015624399

Gash, V. & Inanc, H. 2013. Insecurity and the Peripheral Workforce. In: Gallie, D. (ed.) Economic crisis, quality of work & social integration: The European Experience. Oxford: Oxford University Press, 142-168.

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.

Godard, J. 2004 A Critical Assessment of the High-Performance Paradigm International Journal of Employment Relations 39 (1), 25–52.

Goos, M. & Manning, A. 2007. Lousy and Lovely Jobs: The Rising Polarization of Work in Britain. The Review of Economics and Statistics 89 (1), 118–133.

Grebner, S. Semmer, N. de Faso, L. Gut, S. Kälin, W. and Elfering, A. 2003. Working conditions, well-being and job related attitudes among call center agents, European Journal of Work and Organizational Psychology 12 (4), 341–365.

Green, F. & McIntosh, S. 2001. the Intensification of Work in Europe. Labour Economics 8 (2), 291–308.

Green, F. 2004. Why has work effort become more intense?.Industrial Relations: A Journal of Economy and Society 43 (4), 709-741.

Green, F. 2006. Demanding Work. The Paradox of Job Quality in the Affluent Economy. Princeton: Princeton University Press.

Green, F. 2008. Work effort and worker well-being in the age of affluence. In: Burke, R. and Cooper, C. The Long Work Hours Culture: Causes, Consequences and Choices. Bingley, UK: Emerald Publishing, 115-136.

Green, F., 2009. Subjective Insecurity around the World. Cambridge Journal of regions, Economy and Society 2, 343-363.

Green, F., 2013. Skills and Skilled Work: An Economic and Social Analysis. Oxford: Oxford University Press.

Green, F., Mostafa, T., Parent-Thirion, A., Vermeylen, G., Van Houten, G., Biletta, I. & Lyly-Yrjänäinen, M., 2013. Is Job Quality Becoming More Unequal? Industrial & Labor Relations Review 66 (4), 753-784.

Green, F., Felstead, A., Gallie, D., Inanc, H. & Jewson, N. 2016a. The Declining Volume of Workers' Training in Britain. British Journal of Industrial Relations 54 (2), 422–448.

Green, F., Felstead, A., Gallie, D. & Henseke, G. 2016b. Skills and work organisation in Britain: a quarter century of change. Journal for Labour Market Research 0(0). First Online: 15 February 2016. DOI: 10.1007/s12651-016-0197-x

Greenan, N., Kalugina, E. & Walkowiak, E. 2014. Has the quality of working life improved in the EU-15 between 1995 and 2005? Industrial and Corporate Change 23 (2), 399 -428.

Grimshaw, D. & Lehndorff, S. 2010. Anchors for job quality: Sectoral systems of employment in the European context. Work Organisation, Labour and Globalisation 4 (1), 24-40.

Grimshaw, D. & Figuereido, 2012. Women,s Changing Job Structure in Europe: Patterns of Job Concentration, Low Pay and Welfare State Employment. Fernández-Macías, E., Hurley, J. and Storrie, D., 2012. Transformation of the Employment Structure in the EU and USA. 1995-2007. Basingstone: Palgrave Macmillan, pp. 75-110.

Grönlund, A., Halldén, K. & Magnusson, C. 2017. A Scandinavian Success Story? Women's labour Market Outcomes in Denmark, Filnand, Norway and Sweden. Acta Sociologica 60 (2), 97-119.

Gustavsen, B. 2007. Work Organization and 'the Scandinavian Model'. Economic and Industrial Democracy 28 (4), 650-671.

Haataja, A. & Juutilainen, V. 2014. Kuinka pitkään lasten kotihoitoa? Selvitys äitien lastenhoitojaksoista kotona 2000-luvulla. KELA: Työpapereita 58/2014.

Haataja, A., Kauhanen, M. & Nätti, J. 2011. Underemployment and part-time work in the Nordic countries. Kela, Research Department. Online working papers 31/2011.

Hall, P. & Soskice, D., 2001. An Introduction to Varieties of Capitalism. In: Hall P. and Soskice D. (eds.) Varieties of Capitalism: The Institutional Foundations of Comparative Advantage. Oxford: Oxford University Press. Pp. 1–68.

Hall, P. & Thelen, K. 2009. Institutional Change in Varieties of Capitalism. Socio-Economic Review 2009, 7, 7–34

Haipeter, T & Pernod-Lemattre, M. 2005. Lean banking: retail and direct banking in France and Germany. In: Bosch et a. (eds). Working in the service sector –a tale from different worlds. London and New York, 339-371.

Handel, M., 2005. Trends in Perceived Job Quality, 1989 to 1998. Work and occupations 32 (1), 66–94.

Hauff, S. & Kirchner, S. 2014. Cross-national differences and trends in job quality –a literature review and research agenda. Diskussionspapiere der Universität Hamburg. Nr. 13/2014.

Hauptmeier, M., & Vidal, M. (Eds.) 2014. Comparative Political Economy of Work. Hampshire, UK: Palgrave Macmillan. 384 pp.

Harkess, J. 2007. Improving comparability of translations. In Jowell, R., Roberts, C., Fitzgerald, R. & Eva, G. (eds.) Measuring attitudes cross-nationally. Lessons from the European Social Survey. Sage Publications, London, 79-94.

Heiskala, T. & Jokinen, E. 2014. Stability and Change of the Quality of Working Life in Restructuring Municipalities. Social Indicators Research 118 (2), 579-599.

Hegewisch, A. & Gornick, J. 2011. The impact of work-family policies on women's employment: a review of research from OECD countries. Community, Work & Family 14 (2), 119-138.

Hennig, M., Stuth, S., Ebach, M., & Hägglund, A. 2012. How do employed women perceive the reconciliation of work and family life? A seven-

country comparison of the impact of family policies on women's employment. International Journal of Sociology and Social Policy 32 (9/10), 513-529.

Hellevik, O. 2009. Linear versus logistic regression when the dependent variable is a dichotomy. Quality and quantity 43, 59-74.

Hellman, C., Monni, M. & Alanko, A. 2017. Declaring, shepherding, managing: The welfare state ethos in Finnish government programmes, 1950-2015. Research on Finnish Society 0(0), in press.

Hernes, H. M. 1987. Welfare state and woman power: Essays in state feminism. A Scandinavian University Press Publication.

Herrick, N. & Maccoby, M. 1975. Humanizing Work: A Priority Goal of the 1970s. In Davis, L.E. & Cherns, A.B. The quality of working life. Volume one: problems, prospects and the state of art. The Free Press. A Division of Macmillan Publishing Co., New York., 63-77.

Herzberg, F., Mausner, B., Peterson, R., & Capwell, D. 1957. Job attitudes: Review of research and opinion. Pittsburg: Psychological Service of Pittsburg.

Hevenstone, D. 2010. National Context and Atypical Employment, International Sociology 25, 315 – 347.

Hipp, L., Bernhardt, J., & Allmendinger, J. 2015. Institutions and the prevalence of nonstandard employment. Socio-Economic Review 13 (2), 351-377.

Hirvonen, H. 2014. Habitus and care: Investigating welfare service workers' agency. Doctoral dissertation. Jyväskylä Studies in Education, Psychology and Social Research, 497. Jyväskylä: University of Jyväskylä.

Holman, D., 2013a. Job types and job quality in Europe. Human relations 66 (4), 475-502.

Holman, D., 2013b. An explanation of cross-national variation in call centre job quality using institutional theory. Work, Employment, & Society 27 (1), 21-38.

Holman, D. & MacClelland, C.R. 2011. Job quality in growing and declining economic sectors of the EU. WALQING working paper 2011.3.

Hult, C. & Svallfors, S. 2002. Production Regimes and Work Orientations: A Comparison of six Western Countries. European Sociological Review 18 (3), 315–331.

Huzzard, T. 2003. The Convergence of the Quality of Working Life and Competitiveness: A Current Swedish Literature Review. Work Life in Transition. 2003: 9. Stockholm. National Institute for Working Life.

Häusermann, S., Kurer, T. and Schwander, H. 2015. High-skilled Outsiders? Labor market vulnerability, education and welfare state preferences. Socio-Economic Review 13 (2), 235-258.

Inanc, H, Felstead, A, Gallie, D, & Green, F. 2013. Job Control in Britain: First Findings from the Skills and Employment Survey 2012, London: Centre for Learning and Life Chances in Knowledge Economies and Societies, Institute of Education.

ILO, 1999. Report of the Director General. Decent Work. ILO, Geneva.

ILO, 2008. Measurement of Decent Work, report of the director general, ILO, Geneva.

Jacobs, J. A., & Gerson, K. 2001. Overworked individuals or overworked families? Explaining trends in work, leisure, and family time. Work and occupations 28 (1), 40-63.

Johnson, P., Wood, G., Brewster, C. & Brookes, M. 2009. The Rise of Post-Bureaucracy: Theorists' Fancy or Organisational Praxis? International Sociology 24 (1), 37–61.

Jowell, R. 1998. How comparative is comparative research? The American Behavioral Scientist 42:2, 168–177.

Julkunen, R. 2008. Uuden työn paradoksit. Keskusteluja 2000-luvun työprosess(e)ista. Tampere: Vastapaino.

Järnefelt, N., & Lehto, A. M. 2002. Työhulluja vai hulluja töitä?: tutkimus kiirekokemuksesta työpaikoilla. Tilastokeskus.

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.

Kalleberg, A. 2009. Precarious Work, Insecure Workers: Employment Relations in Transition. American Sociological Review 74 (1), 1–22.

Kalleberg, A. 2011. Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s. New York: Russell Sage Foundation.

Kalleberg, A., Nesheim, T., & Olsen, K. 2009. Is Participation Good or Bad for the Workers? Effects of Autonomy, Consultation, and Teamwork on Stress among Workers in Norway. Acta Sociologica 52 (2), 99–116.

Kasvio, A., Gonäs, L. & Skorstad, E. 2012. In search of the Nordic working life model; introduction to the thematic issue. Nordic Journal of Working Life Studies 2 (4), 1-19

Katz, H. C. and Darbishire, O.R. 2000. Converging divergences: Worldwide changes in employment systems, Cornell University Press.

Karasek, R. 1979. Job demands, job decision latitude, and mental strain: implications for job design", Administrative Science Quarterly, 24, pp. 285-308.

Karasek, R., and Theorell, T. 1990. Healthy Work: Stress Productivity and the Reconstruction of Working Life. New York: Basic Books.

Karamessini, M. & Rubery, J. (Ed.) 2013. Women and Austerity: The Economic Crisis and the Future for Gender Equality. Abingdon: Routledge.

Kerkhofs, M., Chung, H. & Ester, P., 2008. Working Time Flexibility across Europe: a Typology Using Firm-level Data. Industrial Relations Journal 39 (6), 569–585.

Kerr, C. Dunlop, J. Harbison, F. & Myers, C. 1960. Industrialism and Industrial Man. The Johns Hopkins University Press.

Kettunen, P. 2012. Reinterpreting the historicity of the Nordic model. Nordic Journal of Working Life Studies 2 (4), 21-43.

Kiernan, W. E. & Knutson, K. (1990). Quality of work life. In Shalock, Robert L. & Begab, Michael J. (Eds.) Quality of life: Perspectives and issues. American Association of Mental Retardiation, Washington DC. Pp

Kinnie, N., Hutchinson, S. & Purcell, J. 2000. ‘'Fun and surveillance': the paradox of high commitment management in call centres’. International Journal of Human Resource Management 11 (5), 967-985.

Klandermans, B., Hesselink, J. K. & Van Vuuren, T. 2010. Employment status and job insecurity: On the subjective appraisal of an objective status. Economic and Industrial Democracy 31 (4), 557 -577.

Koivunen, T. 2011. Gender in Call Centre Work. Doctoral Dissertation. Acta Universitatis Tamperensis 1680. Tampere: Tampere University Press

Korpi, W. (2000) Faces of Inequality: Gender, Class, and Patterns of Inequalities in Different Types of Welfare States. Social Politics: International Studies in Gender, State & Society 7(2), 127-191.

Korpi, W. (2006) Power Resources and Employer-Centered Approaches in Explanations of Welfare States and Varieties of Capitalism: Protagonists, Consenters and Antagonists. World politics 58 (2), 167-206.

Korpi, W., Ferrarini, T. & Englund, S. 2013. Women's opportunities under different family policy constellations: gender, class, and inequality tradeoffs in Western countries re-examined. Social Politics: International Studies in Gender, State & Society 20 (1), 1-40.

Lammi-Taskula, J., Brandth, B., Duvander, A-S., Gíslason, I., Eydal, B. & Rostgaardm T. 2011. Parental leave, childcare and gender equality in the Nordic countries.
http://ffdd.ru/activity/attach/information/182/parental_leave_childcare_and_gender_equality_in_the_nordic_countries.pdf

Lawler, E. 1975. Measuring the Psychological Quality of Working Life: The Why and How of It. In Davis, L.E. & Cherns, A.B. The quality of working life. Volume one: problems, prospects and the state of art. The Free Press. A Division of Macmillan Publishing Co., New York, 123-133.

Lehto, A-M. 1996. Työolot tutkimuskohteena. Työolotutkimusten sisällöllistä ja menetelmällistä arviointia yhteiskuntatieteen ja naistutkimuksen näkökulmasta. Väitöskirja. Tilastokeskus, Tutkimuksia 222. Helsinki.

Lehto, A-M. & Sutela, H. 2008. Työolojen kolme vuosikymmentä 1977–2008. Helsinki: Tilastokeskus.

Lehto, A.-M., & Sutela, H. 2005. Threats and Opportunities: Findings of Finnish Quality of Working life Surveys 1977–2003. Helsinki: Statistics Finland.

Leschke, J. & Watt, A., 2008. Job Quality in Europe. ETUI-REHS working paper WP.2008.07.

Leschke, J. Watt, A. & Finn, M. 2008. Putting a number on job quality? Constructing a European Job Quality Index. European Trade Union Institute for Research, Education and Health and Safety (ETUI-REHS), WP. 2008.3.

Leschke, J. Watt, A. & Finn, M. 2012. Job quality in the crisis – an update of the Job Quality Index (JQI). European Trade Union Institute for Research, Education and Health and Safety (ETUI-REHS), WP 2012.07.

Leschke, J. & Watt, A. 2014. Challenges in Constructing a Multi-dimensional European Job Quality Index, in: Social Indicators Research, 118 (1), 1-31: DOI: 10.1007/s11205- 013-0405-9.

Leschke, J. & Jepsen, M. 2014. Is the Economic Crisis Challenging the Prevailing Gender Regime? A Comparison of Denmark, Germany, Slovakia, and the United Kingdom, Social Politics: International Studies in Gender, State & Society 21 (4), 485-508.

Lempiäinen, K. 2015. Precariousness in Academia - The prospects of employment in changing universities. In Porta, D, Hänninen S, Siisiäinen M & Silvasti T (ed.) "The New Social Division. Making and Unmaking Precariousness" Basingstoke: Palgrave Macmillan.

Lewis, J. 1992. Gender and the development of welfare regimes. Journal of European Social Policy 2 (3), 159–173.

Lloyd, C. & Payne, J. 2013. Changing job roles in the Norwegian and UK fitness industry: in search of national institutional effects. Work, Employment & Society 27 (1), 3-20.

Lopes, H., Lagoa, S. & Calapes, T. 2014. Declining Autonomy at Work in the EU and its Effect on Civic Behaviour. Economic and Industrial Democracy 35 (2), 341-366.

Lopes, H., Calapez, T. & Lopes, D. 2015. The Determinants of work autonomy and employee involvement: a multilevel analysis. Industrial and economic democracy 0(0), 1-25. doi: 10.1177/0143831X15579226

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.

Mandel, H. 2012. Winners and Losers. The Consequences of Welfare State Policy for Gender Wage Inequality. European Sociological Review 28, 241-262.

Mandel, H., & Semyonov, M. 2005. Family policies, wage structures, and gender gaps: Sources of earnings inequality in 20 countries. American sociological review 70 (6), 949-967.

Mandel, H. & Semyonov, M. 2006. A Welfare State Paradox: State Interventions and Women's Employment Opportunities in 22 Countries. American Journal of Sociology 111 (6), 1910-1949.

Mandel, H. & Shalev, M., 2009a. Gender, Class, and Varieties of Capitalism. Social Politics: International Studies in Gender, State & Society 16 (2), 161-181.

Mandel, H. & Shalev, M. 2009b. How Welfare States Shape the Gender Pay Gap: A Theoretical and Comparative Analysis. Social Forces 87 (4), 1873-1911

Martel, J-P. & Dupuis, G., 2006. Quality of work life: Theoretical and methodological problems, and presentation of a new model and measuring instrument. Social Indicators Research 77 (2), 333–368

McCall L (2001) Complex Inequality: Gender, Class and Race in the New Economy. New York: Routledge.

McGinnity, F. & Calvert, E. 2009. Work-life Conflict and Social Inequality in Western Europe. Social Indicators Research 93 (3), 489-508.

Meagher, G., Szebehely, M., & Mears, J. 2016. How institutions matter for job characteristics, quality and experiences: a comparison of home care work for older people in Australia and Sweden. Work, Employment & Society 0(0), doi: 0950017015625601.

Minkov, M. 2013. Cross-Cultural Analysis: The Science and Art of Comparing the World's Modern Societies and Their Cultures. London : SAGE.

Mills, C. W. 1959. The Sociological Imagination. tark. Painos.

Mood, C. 2010. Logistic Regression: Why We Cannot Do What We Think We Can Do, and What We Can Do About It. European Sociological Review 26 (1), 67-82.

Movitz, F. & Levinson, K. 2013. Employee Board Representation in the Swedish Private Sector. In Sandberg, Å. (ed). Nordic Lights. Welfare, Management and Welfare in Scandinavia. SNS Förlag, 471-485.

Mulholland, K. 2004. Workplace resistance in an Irish call centre: Slammin', scammin', smokin' an' leavin'. Work, Employment and Society 18 (4), 709–772.

Muñoz de Bustillo Llorente, R. & Fernández-Macías E. 2005. Job satisfaction as an indicator of the quality of work. Journal of Socio-Economics, 34, 656-673.

Muñoz de Bustillo, R., Fernández-Macías, E., Antón J-I., & Esteve, F. 2009. Indicators of job quality in the European Union. Directorate-generale for internal policies. Policy department. Employment and social affairs. http://www.europarl.europa.eu/RegData/etudes/etudes/join/2009/429972/IPOL-EMPL_ET(2009)429972_EN.pdf

Muñoz De Bustillo, R. & De Pedraza, P. 2010. Determinants of job insecurity in five European countries. European Journal of Industrial Relations 16 (1), 5-20.

Muñoz de Bustillo, R., Fernández-Macías, E., Antón J-I., & Esteve, F. 2011 Measuring More than Money: The Social Economics of Job Quality. Cheltenham: Edward Elgar.

Mustosmäki, A., Anttila, T. Oinas, T & Nätti, J. 2013. Konvergenssi vai divergenssi? Vertaileva tutkimus työelämän laadun muutoksesta Euroopassa 1995–2010. Yhteiskuntapolitiikka 78 (6), 618-631. (Convergence or divergence? Comparative study on changing job quality in Europe 1995-2010)

Mustosmäki, A. & Anttila, T. 2012. Liukuhihna toimistossa. In Pyöriä, P. (ed.) 'Työhyvinvointi ja organisaation menestys'. Gaudeamus, Helsinki.

(Assembly line in the office, published in book "Wellbeing at work and organizational success")

Mühlau, P. 2011. Gender inequality and job quality in Europe. Management Revue 2011, 114-131.

Mänttäri-van der Kuip, M. 2015. Work-Related Well-Being among Finnish Frontline Social Workers in an Age of Austerity. Doctoral dissertation. Jyväskylä studies in education, psychology and social research 524. Jyväskylä: University of Jyväskylä.

Nadler, David A. & Lawler, Edward E. 1983. Quality of work life: Perceptions and directions. Organizational Dynamics 11 (3), 20–30.

Nordenmark, M. 2004. Does gender ideology explain differences between countries regarding the involvement of women and of men in paid and unpaid work? International Journal of Social Welfare 13(3), 233-243

OECD Employment Outlook 2003: Towards more and better jobs. OECD, Paris.

OECD Employment Outlook 1997: Is Job Insecurity on the Increase in OECD Countries? In: Employment Outlook. Paris: OECD, pp. 129-160.

OECD Employment Outlook 2014. Non-regular employment, job security and the labour market divide, 141-210. DOI:10.1787/empl_outlook-2014-en

Offe, C. 2003. The European Model of 'Social' Capitalism: Can it survive European Integration? Journal of Political Philosophy 11 (4), 437-469.

Olsen, K., Kalleberg, A. & Nesheim, T. 2010. Perceived job quality in the United States, Great Britain, Norway and West Germany, 1989–2005. European Journal of Industrial Relations 16 (3), 221–240.

Osterman, P. 2013. Introduction to the Special Issue on Job Quality: What Does it Mean and How Might We Think about It? Industrial & Labor Relations Review 66 (4), 739 -752.

Parent-Thirion, Agnes., Fernández Macías, E., Hurley J. & Vermeylen G. Fourth European Working Conditions Survey. European Foundation for the Improvement of Living and Working Conditions. Luxembourg, Office for Official Publications of the European Communities, 2007.

Paugam, S. & Zhou, Y. 2007. Job Insecurity. In: Gallie, D. (ed.) Employment Regimes and the Quality of Work. Oxford: Oxford University Press, 179–204.

Payne, J. 2004. Re-evaluating the Finnish Workplace Development Programme: Evidence from Two Projects in the Municipal Sector, Economic and Industrial Democracy 25 (4), 485–524.

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.

Peña-Casas, R. 2009. More and Better Jobs: Conceptual Framework and Monitoring Indicators of Quality of Work and Employment in the EU Policy Arena.

Peña-Casas, R. 2013. Are There Significant Differences in Quality of Work and Employment between 'Old' and 'New' Europe? OSE Research Paper No. 12.

Pocock, B. and Skinner, N. 2012. Good jobs, bad jobs and the Australian experience. In: Warhurst, C., Findlay, P. Tilly, C., and Carré, F. (eds.) Are bad jobs inevitable? Palgrave Macmillan, 61-77

Pärnänen, A. 2015a. Työn tekemisen tavat 2000-luvulla – tapahtuiko rakenteellisia muutoksia? Työelämän tutkimus 13 (3), 242-250.

Pärnänen, A. 2015b. Nollatuntisopimukset –epävarmuutta vai toivottua joustoa? Tieto & trendit-blogi. [online] http://tietotrenditblogi.stat.fi/kenelle-kay-nollatuntisopimus/> luettu 28.1.2016.

Pääkkönen, H. & Hanifi, R. 2011. Ajankäytön muutokset 2000-luvulla. Tilastokeskus, Helsinki.

Ramsay, H., Scholarios, D., & Harley, B. 2000. Employees and high-performance work systems: testing inside the black box. British Journal of industrial relations 38 (4), 501-531.

Ratkaisujen Suomi. 2015. Pääministeri Juha Sipilän hallituksen strateginen ohjelma 29.5.2015.http://valtioneuvosto.fi/documents/10184/1427398/Ratkaisujen+Suomi_FI_YHDISTETTY_netti.pdf/801f523e-5dfb-45a4-8b4b-5b5491d6cc82

Rubery, J. 2002. Gender Mainstreaming and Gender Equality in the EU: The Impact of the EU Employment strategy. Industrial Relations Journal 33 (5), 500–522.

Rubery, J. 2009. How gendering the varieties of capitalism requires a wider lens. Social Politics: International Studies in Gender, State & Society 16 (2), 192-203.

Rubery, J. 2011. Towards a gendering of the labour market regulation debate. Cambridge Journal of Economics 35 (6), 1103–1126.

Russell, H. & McGinnity, F. 2014. Under pressure: The impact of recession on employees in Ireland. British Journal of Industrial Relations 52 (2), 286-307

Saarikallio-Torp, M. & Haataja A. 2016. Isien vanhempainvapaiden käyttö on yleistynyt. Ketkä isistä vapaita käyttävät ja ketkä eivät? In A. Haataja, I. Airio, M. Saarikallio-Torp& M. Valaste (eds.) Laulu 573566 perheestä. Lapsiperheet ja perhepolitiikka 2000-luvulla. Helsinki: Kela, 80–115

Sandberg, Å. (ed.) 1995. Enriching Production –Perspectives to Volvo's Udeevala Plant as an Alternative to Lean Production. Avebury, Aldershot, Digital edition 2007.

Saloniemi, A. and Virtanen, P. 2008. Joustavan huomisen varjossa? In: Heiskanen, T. & Leinonen, M. & Järvensivu, A. ja Aho, S. (eds.) Kohti uutta työelämää? Tutkimuksen näkökulma työelämän kehitykseen. Tampere: Tampereen yliopistopaino, 78-108.

Saris, W. E. & Gallhofer, I. 2007. Can questions travel successfully? In Jowell, R., Roberts, C., Fitzgerald, R. & Eva, G. (eds.) *Measuring attitudes cross-*

nationally. Lessons from the European Social Survey. Sage Publications, London, 53–78.

Schaufeli, W.B. & Bakker, A.B. 2004. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study", Journal of Organizational Behavior 25, 293-315.

Scherer, S., & Steiber, N. 2007. Work and family in conflict? The impact of work demands on family life. In: Gallie, D. (ed.) *Employment regimes and the quality of work*, 137-178.

Scherer, S. 2009. The Social Consequences of Insecure Jobs. Social Indicators Research 93 (3), 527–547.

Scholte, J.A. 2005. Globalization: A critical introduction. Secod edition. Palgrave Macmillan. New York.

Scott, J. 2006. Family and gender roles: How attitudes are changing. Arxius 15, 143-154

Schouteten, R. & Benders, J. 2004. Lean production assessed by Karasek's job demand – job control model. Economic and Industrial Democracy 25 (3), 347-73.

Seashore, S. 1975. Defining and Measuring the Quality of Working Life. In Davis, L.E. & Cherns, A.B. The quality of working life. Volume one: problems, prospects and the state of art. The Free Press. A Division of Macmillan Publishing Co., New York, 105-118.

Sheppard, H. 1975. Some of the Indicators of Quality of Working Life: A Simplified Approach to Measurement. In Davis, L.E. & Cherns, A.B. The quality of working life. Volume one: problems, prospects and the state of art. The Free Press. A Division of Macmillan Publishing Co., New York, 119-120.

Sjöberg, O. 2010. Social insurance as a collective resource: unemployment benefits, job insecurity and subjective well-being in a comparative perspective. Social Forces 88 (3), 1281-1304.

Sengupta, S., Edwards, P.K. & Tsai C-J. 2009. The Good, the Bad, and the Ordinary: Work Identities in "Good" and "Bad" Jobs in the United Kingdom. Work and Occupations, 36 (1), 26-55.

Siegrist, J. 1996. Adverse health effects of high effort-low reward conditions, Journal of Occupational Health Psychology, 1, 27-41.

Sippola, M. 2011. Työelämän laadun käsitteen muutos – sisällönanalyysi kansainvälisistä liiketaloustieteen artikkeleista vuosina 1984–2009. Hallinnon Tutkimus 30 (1), 20–36, 2011.

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.

Solheim, E. & Leiulfsrud, H. 2015. A European analysis of subsistence precarisation and precarious risk. In Porta, D, Hänninen S, Siisiäinen M & Silvasti T (eds.) "The New Social Division. Making and Unmaking Precariousness" Basingstoke: Palgrave Macmillan.

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.

Smith, M., Burchell, B., Fagan, C., & O'Brien, C. 2008. Job quality in Europe. Industrial Relations Journal 39 (6), 586–603.

Soininen, T. 2015. Changing expectations and realities of employment stability: longitudinal analysis of tenures in Finland. Publications of the University of Eastern Finland. Dissertations in Social Sciences and Business Studies, 102.

Soskice, D. 1999. Divergent production regimes: Coordinated and uncoordinated market economies in the 1980s and 1990s. In: Kitschelt, H., Lange, P., Marks, G., & Stephens, J. D. (eds.) Continuity and Change in Contemporary Capitalism Cambridge: Cambridge University Press, 101–134.

Soskice, D. 2005. Varieties of Capitalism and Cross-National Gender Differences. Social Politics 12 (2), 170–179.

Stier, H & Yaish, M. 2014. Occupational segregation and gender inequality in job quality: a multi-level approach. Work, Employment & Society 28 (2), 225-246

Stier, H. 2015. The Skill-divide in job quality: A cross-national analysis of 28 countries. Social Science Research 49, 70-80.

Steiber, N. and Haas, B. 2012. Advances in explaining women's employment patterns. Socio-Economic Review 10 (2), 343–367.

Storrie, D., Hurley, J. & Fernández-Macías, E. 2012. Introduction. In: Fernández-Macías, E ., Hurley, J. and Storrie, D. (eds.) Transformation of the Employment Structure in the EU and USA, 1995-2007. Palgrave Macmillan.

Sutela, H. 2013. Määräaikainen työ ja perheellistyminen Suomessa 1984-2008 (Fixed-term employment and family formation in Finland 1984-2008, academic dissertation). Tilastokeskus, Helsinki.

Sundström, M. & A-Z. Duvander. 2002. Gender division of childcare and the sharing of parental leave among new parents in Sweden. European Sociological Review 18, 433–447.

Sutela, H. & Lehto, A-M. 2014. Työolojen muutokset 1977-2013. [Changes in the working conditions 1977-2013]. Helsinki: Statistics Finland.

SVT 2014. Suomen virallinen tilasto. Työvoimatutkimus [verkkojulkaisu]. ISSN=1798-7830. Työllisyys ja työttömyys 2014. Noin 83000 palkansaajalla on nollatuntisopimus. Helsinki: Tilastokeskus [viitattu:28.1.2016]. Saantitapa: http://www.stat.fi/til/tyti/2014/13/tyti_2014_13_2015-03-05_tie_001_fi.html

Tangian, A. 2007. Is Work in Europe Decent? A Study Based on the 4th European Survey of Working Conditions 2005. Diskussionspapier Nr. 157. WSI in der Hans Böckler Stiftung.

Taylor, P. Baldry, C. Bain, P. & Ellis, V. 2003. "A Unique Working Environment": Health, Sickness and Absence Management in UK Call Centres. Work, Employment and Society 17 (3), 435–458.

National Quality of Working Life Development programme 2020. TEM 2012. Työelämän kehittämisstrategia vuoteen 2020. Työ- ja elinkeinoministeriö. Erillisjulkaisut.
http://www.tyoelama2020.fi/tyoelama_2020_-hanke/tyoelamastrategia >last retrieved 29.9.2016.

Tervonen-Gonçalves, L. & Oinonen, E. 2012. Vertailun valta. Yhteiskuntapolitiikka 77 (1), 3-15.

Thevenon, O. 2013. Drivers of female labour force participation in the OECD. OECD Social, Employment and Migration Working papers, No. 145, OECD Publishing.

Tilly, C. 1997. Arresting the Decline of Good Jobs in the USA? Industrial Relations Journal, 28 (4), 269-274.

Townsend, K. 2005. Electronic surveillance and cohesive teams: Room for resistance in an Australian call centre? New Technology, Work and Employment 20 (1), 47–59.

Turunen, T. 2012. Työorientaatiot muutoksessa? - Suomalaisten palkansaajien työhön ja organisaatioon sitoutuminen sekä työhön kohdistuvat odotukset eurooppalaisessa vertailussa. (Work orientation in a flux?) Doctoral dissertation. University of Helsinki, Faculty of Social Sciences, Department of Social Studies.

Tåhlin, M. 2007. Skills and Wages in European Labour Markets: Structure and Change. In: Gallie, D. (ed.) Employment Regimes and the Quality of Work. New York: Oxford University Press, 35–76.

Valeyre, A., Lorenz, E., Cartron, D., Csizmadia, P., Gollac, M., Illéssy, 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.

Van der Lippe, T., Jager, A., & Kops, Y. 2006. Combination pressure the paid work-family balance of men and women in European countries. Acta Sociologica 49 (3), 303-319.

Vanselow, A., Warhurst, C., Bernhardt, A. & Dresser, L. 2010. Working at the Wage Floor: Hotel Room Attendants and Labor Market Institutions in Europe and the United States. In: Gautié, J. and Schmitt, J. Low-wage work in a wealthy world. Russell Sage, New York, 269-318.

Vos, K. 2006. Europeanization and Convergence in Industrial Relations. European Journal of Industrial Relations 12 (3), 311–327.

Yaish. M & Stier, H. (2009) Gender Inequality in Job Authority: A Cross-National Comparison of 26 Countries. Work and Occupations 36 (4), 343–366.

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.

Walton, R.E. 1975. Criteria for Quality of Working Life. In Davis, L.E. & Cherns, A.B. The quality of working life. Volume one: problems, prospects and the

state of art. The Free Press. A Division of Macmillan Publishing Co., New York. 91-104..

Warren, T. & Lyonette, C. 2015. The Quality of Part-Time Work. In: Felstead, A., Gallie, D. & Green, F. (eds.) Unequal Britain at work. Oxford university press, 62-82.

White, M., Hill, S., McGovern, P., Mills, C., & Smeaton, D. 2003. 'High-performance' Management Practices, Working Hours and Work–Life Balance.British Journal of Industrial Relations 41 (2), 175-195.

Wilthagen, T. & F. Tros. 2004. The Concept of 'Flexicurity': a new approach to regulating employment and labour markets" in 'Flexicurity: Conceptual Issues and Political Implementation in Europe' Transfer, European Review of labour and research, 10 (2), 166-186.

Winiecki, D.J. & Wigman, B. 2007. Making and Maintaining the Subject in Call Centre Work. New Technology, Work and Employment 22 (2), 118–131.

Webb, J. 2010. Gender and post-industrial shift. In Scott. J, Crompton, R. & Lyonette, C. (eds.) Gender Inequalities in the 21st Century New Barriers and Continuing Constraints. UK: Edward Elgar, 85-108.

Zapf, D. Isic, A. Bechtoldt, M. & Blau, P. 2003. What Is Typical for Call Centre Jobs? Job Characteristics, and Service Interactions in Different Call Centres. European Journal of Work and Organizational Psychology, 12 (4), 311–340.

ORIGINAL PAPERS

I

IS FINLAND DIFFERENT? QUALITY OF WORK AMONG FINNISH AND EUROPEAN EMPLOYEES

by

Hartikainen, A., Anttila, T., Oinas, T. and Nätti, J. (2010)

Research on Finnish Society 3, 29-41.

Research on Finnish Society
Vol. 3 (2010), pp. 29–41

ISSN 1796-8739

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

Armi Hartikainen
University of Jyväskylä

Timo Anttila
University of Jyväskylä

Tomi Oinas
University of Jyväskylä

Jouko Nätti
University of Tampere

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.

Armi Hartikainen is a Researcher at the Department of Social Sciences and Philosophy, University of Jyväskylä. Timo Anttila is a Postdoctoral researcher at the Department of Social Sciences and Philosophy, University of Jyväskylä. Tomi Oinas is a Researcher at the Department of Social Sciences and Philosophy, University of Jyväskylä. Jouko Nätti is a Professor at the Department of Social Research, University of Tampere. Corresponding author: Armi Hartikainen, Department of Social Sciences and Philosophy P.O. Box 35, FIN-40014 University of Jyväskylä, Finland. E-mail: armi.e.hartikainen@jyu.fi

Financial support from the Finnish Work Environment Fund is gratefully acknowledged.

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 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 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 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 use 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; Tåhlin, 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 defined as the extent to which workers can influence their work duties, requirements and organization. It also has 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 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. This 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 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 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 ¾ 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). Length 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 score ranging from 1 to 5 was employed, which showed that the higher the score 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 nature of employment contract. 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. This measure was 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 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 a score ranging 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 standard-

ized 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 Regarding the effort, 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 significant workplace safety programs and measures have taken place in these countries. Every third Scandinavian say that they think their health is at risk, where as elsewhere in Europe same answer is given by

Table 1
Measures of job quality.

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

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 em-

Table 1
Continued.

Items in EWCS 2005	Scale	Indexes and indicators
INSECURITY		
Subjective	1. Strongly disagree	*High insecurity dummy*
"I might lose my job in the next 6 months."	2. Disagree	- agree or strongly agree
	3. Neither agree nor disagree	with the statement
	4. Agree	*Insecurity index*
	5. Strongly agree	- scale 1 to 5
Objective		
"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	
HEALTH AND SAFETY		
Subjective		
"Do you think your health is at risk because of your work?"	Yes (1) – No (0)	*Health at risk dummy*
		- Health at risk = yes
Objective		
"Are you exposed at work to…"		
A. Vibrations	1. All of the time	*Health risks index (mean)*
B. Noise	2. Almost all of the time	- scale 1 to 7
C. High temperatures	3. Around ¾ of the time	- Chronbach's α=0.86
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		
JOB SATISFACTION		
"On the whole, how satisfied are you with the working conditions in your main paid job?"	1. not at all satisfied	*Index of job satisfaction (mean)*
	2. not very satisfied	- standardized items (z-scores)
	3. satisfied	- Chronbach's α=0.75
	4. very satisfied	
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	

ployees (32%) consider their jobs to be well paid, whereas nearly half of the respondents have similar opinions in Scandinavia (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 analyses 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 group which show that the overall picture of job quality is very similar in compari-

Figure 1. Dimensions of job quality in country clusters as uncontrolled percentages.

son 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 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 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 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 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 corre-

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

	High skill requirements	*High autonomy*	*High effort*	*High insecurity*	*Health at risk*	*Well paid*
Age	1	1.01*	0.99*	0.98*	1	1
Gender						
Female	0.64*	1	0.90*	1.08	0.64*	0.76*
Male (ref.)	1	1	1	1	1	1
Occupation						
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
Industry						
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
Sector						
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
Country group						
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
N	*19873*	*19873*	*19798*	*18903*	*19413*	*19721*
Nagelkerke R^2	*0.168*	*0.083*	*0.037*	*0.036*	*0.052*	*0.039*
Constant/Sig.	*0.520**	*0.961**	*0.530**	*0.718**	*-0.683**	*-1.14**

* = coefficient significant at 95 % level

spond 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 Scandinavia, 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 European 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

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

		Finland	*Scandinavia*	*Other EU*
Objective	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^2	0.08	0.07	0.08
	Constant	-0.71	-0.25	-0.38
		Finland	*Scandinavia*	*Other EU*
Subjective	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^2	*0.22*	*0.18*	*0.28*
	Constant	*-1.72*	*-1.15*	*-1.42*

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

* = coefficient significant at 95 % level

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 models 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.

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: RECWOWE 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., Illéssy, 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.

II

THE NORDIC DIFFERENCE: JOB QUALITY IN EUROPE 1995-2010

by

Oinas, T., Anttila, T., Mustosmäki, A. & Nätti, J. (2012)

Nordic Journal of Working Life Studies 2(4), 135–52.

Nordic journal of working life studies Volume 2 ▮ Number 4 ▮ November 2012

The Nordic Difference: Job Quality in Europe 1995–2010

▮ **Tomi Oinas**[1)]
Post-doctoral researcher, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

▮ **Timo Anttila**
Docent, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

▮ **Armi Mustosmäki**
Researcher, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

▮ **Jouko Nätti**
Professor, Department of Social Research, University of Tampere, Finland

ABSTRACT

Previous empirical research has pointed out that Nordic countries are distinguished from the rest of Europe in terms of job quality. On the other hand, it has been debated whether, in the longer run, the Nordic welfare state is able to insulate workers from globalization effects. This article investigates whether Nordic countries have retained their advantageous position concerning job quality compared with other EU countries. Empirical analyses are based on the European Working Conditions Survey collected in 1995, 2000, 2005, and 2010. We use data on employees in the 15 member states of the EU prior to enlargement in 2004 (n = 61,457). The results partly confirm previous findings of high job quality in the Nordic countries. However, there are clear differences between Nordic countries. To be precise, Denmark stands out from the rest of Europe and other Nordic countries with its higher level of job quality.

KEY WORDS

Job quality / comparative study / Europe / Nordic countries / working conditions

Distinctiveness of the Nordic countries

Global competition, technological change, and the deregulation of industrial relations are common developments throughout the industrial world and are seen as unifying the conditions and experiences of work in varying countries. Meanwhile, empirical research has shown that there is a notable variation in job quality between countries. Comparative research literature has tried to explain the differences between countries with reference to diverse sets of institutional frameworks, which could mediate the pressures of global change in production conditions and industrial relations. The

[1)] Department of Social Sciences and Philosophy, FIN-40014 University of Jyväskylä, Finland.
E-mail: tomi.oinas@jyu.fi

presumption is that the political and historical compromises on industrial relations and production systems are nation specific (Gallie 2007a; Hult and Svallfors 2002) together with nationally varying societal welfare institutions such as family systems, educational systems, and security systems (Bosch et al. 2007; Davoine et al. 2008; Esping-Andersen 1990; 1999; Lewis 1992; Pascall and Kwak 2005).

In previous comparative studies, the 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 a higher quality of work tasks and better opportunities for participation in decision-making compared with 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 growing amount of comparative research literature is trying to discern differences between countries' institutional patterns and cultural norms in mediating the pressures of global capitalism. The presumption is that there are differences between national political and historical compromises on industrial relations and production systems. National industrial relation systems define, for example, to what extent work conditions are regulated by industry-wide collective bargaining, or by enterprise-level negotiations (Bosch et al. 2007; Burgoon and Raess 2009).

Gallie (2007) distinguishes two forms of argument that have been considered powerful in explaining institutional country differences. The first one classifies country groups according to their production regimes and the second in terms of their employment regimes. These two rivaling approaches can be used to provide a macro-level explanation for high job quality in Nordic countries.

The *production regime theory* derives from the corporatism tradition; however, the focus is mostly on the company level. The theory emphasizes companies as actors in the markets and in the institutional setting in which the companies operate. The institutional setting combines interrelations among educational and training systems, industrial relations systems, national innovation systems as well as corporate governance and the financial system (Soskice 1999; 2005). This approach differentiates between coordinated market economies (CMEs) in which competitiveness is sought through an upgrading of workforce skills, while safeguarding a high employee control over the work process, and the liberal market economies (LMEs), depending upon general skills acquired through the school system and coordinating their activities mainly in terms of hierarchies and competitive market arrangements. The use of relatively low-skilled workforce is based on tighter managerial control, resulting in the intensification of work. Generally, CMEs are characterized by a higher degree of state-led non-market coordination than LMEs, where a greater role is given to competitive market arrangements (Gallie 2007; Olsen et al. 2010).

While production regime theory emphasizes the centrality of the role of employers, the *theory of employment regimes* seeks variation in the power resources, i.e., the relative organizational capacity of employers and employees. Here, the state has an important role as a mediating actor between employers and labor. Employment regime theory assumes three principal types of employment and industrial policies that vary according to the scope of their employment rights and regulation. An *inclusive employment regime* is designed to provide (common) employment rights as widely as possible among populations of working age. *Dualist employment regimes* concentrate on

providing strong rights to the skilled, long-term, core workforce at the expense of the peripheral workforce with low-security jobs. At the other end of the continuum is the *market employment regime* that emphasizes minimal employment regulation and relies on well-functioning market adjustment to create high employment levels. The role of labor in decision-making is restricted and institutional controls are seen as negative rigidities. Gallie (2007, 17) concludes that these three employment systems differ in relatively systematic ways in terms of the involvement of organized labor, principles underlying employment policy and welfare protection, the role of the public sector, and the salience quality of working life programs.

The Nordic countries are considered typical examples of CMEs or inclusive employment regime with universalized employment protection, in which organized labor has a strongly institutionalized position. The tradition of "quality of working life" programs has placed a strong emphasis on enriching the content of tasks, increasing employee discretion over how to carry out their jobs, and facilitating greater employee decision-making in organizational matters. Thus, if the quality of working life programs has had an effect, it is mainly with respect to the dimensions of task discretion and participation (Gallie 2003; Gustavsen 2007). And indeed, the Nordic country cluster scores high in terms of job quality in most international comparisons (Davoine et al. 2008; Gallie 2003; Hartikainen et al. 2010; Johnson et al. 2009; Kerkhofs et al. 2008; Lorenz and Valeyre 2005; Parent-Thirion et al. 2007; Tangian 2007; Wallace et al. 2007).

In contrast, Britain and Ireland are often defined as an example of LMEs or market employment system that is characterized by limited employee decision-making in work processes, tighter managerial control, and a higher intensity of work. However, recent studies point to clear differences between the UK and Ireland and question the validity of grouping them into the same regime (e.g., Gallie 2011). Traditionally, the sharpest distinction is drawn between "coordinated" Nordic and "liberal" Britain (Gallie 2007a).

Continental countries, such as Germany, are often categorized into the CMEs together with Nordic countries, or as an example of a dualist market economy. The Nordic and Continental coordinated societies were seen as having originally been distinct, with the Nordic countries representing a centralized egalitarian model of coordination and the Continental countries a flexibly coordinated model based upon industrial sector coordination. But the two forms were thought to have converged over time into a single flexibly coordinated model (Gallie 2011). In welfare regimes, continental countries like Germany, France, and Austria form an independent "corporatist" regime. In the enlarged EU, Continental countries often represent the job quality "average" (EC 2008).

Southern European countries are not easy to position in production or employment categories; Esping-Andersen originally considered them (immature) variants of the Continental model, but an extension to the southern regime has been proposed by Ferrera (1996). Southern countries are characterized by weak vocational training and early school leavers and medium levels of union centralization, and although they do have high levels of protection for core employees (Davoine et al. 2008), job quality appears lower than in other old EU member states. Employees have fewer opportunities for skill development and influencing their daily tasks and have a lower satisfaction with their jobs and work–life balance (EC 2008; Peña-Casas and Pochet 2009).

The production regime theory postulates that CMEs typically make extensive use of labor with high industry-specific or firm-specific skills. Consequently, they depend on

education and training systems that are able to provide workers with such skills. In contrast, LMEs draw on general skills, which reduce company investments in training that in fluid labor markets can be utilized by other firms (Hall and Soskice 2001). Following this hypothesis, coordinated regimes would foster higher and more specialized skills. The differences in skill systems between CMEs and LMEs are likely to affect dimensions of job quality such as autonomy, opportunities of learning, and other forms of skill acquisition. Based on earlier studies, we expect that coordinated and inclusive regimes will score higher in particular in workers' task discretion or autonomy. If there are differences between CMEs and LMEs in the production systems and in the skill orientation of employers and employees, we should find higher levels of task and skill discretion in the Nordic countries.

When dismissal is made difficult by law, or by trade union procedures, this may reduce the management's ability to use the dismissal threat as a means of obtaining more effort from their workforce. Therefore, employment protection legislation and the level of unionization could be expected to be negatively related to level of work intensity. Work intensity is expected to be at a higher level in countries belonging to LMEs or market employment regime, namely the UK, which are characterized by liberal policy orientation to employment regulation, tighter management control, and weaker trade unions (Gallie 2005; Green and McIntosh 2001; Olsen et al. 2010).

According to institutional explanations, country differences would be expected to persist over time since institutional effects at national level are stronger than the "homogenization" effect of increased international competition and technological change (Olsen et al. 2010). Following Gallie (2011), we can expect the Nordic societies, which are closer to the inclusive employment regime model, to remain distinct in terms of the quality of work from the Continental societies, which are closest in their pattern of employment regulation to the dualistic regime model.

The objective of this study is to investigate whether Nordic countries have retained their advantageous position concerning job quality compared with other EU countries by 2010. Our article contributes to previous research on several points. First, we use a series of representative surveys with identical measure on job quality expanding over 15 years for all EU15 countries, including recent data on 2010. Second, instead of merely comparing country-level averages descriptively, we formally test the relative position of Nordic countries controlling for differences in compositional factors (cp. Eurofound 2012). Third, we classify countries according to theories of production and employment regimes, but all of our analyses are conducted on individual countries, not regimes. This enables us to examine how homogenous various regimes actually are when considering job quality.

Dimensions of job quality

A central methodological choice in assessing 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 and Vaisey 2005). This study follows the tradition of the multidimensional approach to job quality. We employ measures of job quality that have been widely supported in recent literature (Dahl et al. 2009; Gallie 2007a; Green 2006; Olsen et al. 2010). The dimensions included are skills, autonomy, and work effort.

Skills

The possibilities to develop and use skills at work are thought to be central for job quality as they create greater opportunities for internal or external professional mobility, and for finding a new job in case of dismissal, thus increasing the general employability (Employment in Europe 2008). In addition, many developed Western countries have started to emphasize that since they cannot compete with developing countries in mass production, their economic sustainability depends upon production quality, high skills, and creativity (Gallie 2007a). Empirical research shows that in industrialized countries, job requirements, educational levels, and qualifications for work have been rising (Feldstead et al. 2007; Lehto and Sutela 2005; Tåhlin 2007). But if we consider employees' subjective perceptions of the quality of job tasks, a different picture emerges. Opportunities for using and developing skills at work have been on a downward slope in many European countries (Peña-Casas and Pochet 2009), especially in Britain (Feldstead et al. 2007). 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 favor of societal differences in production systems that would differentiate economies according to their emphasis on policies regarding improvement of the quality of working life while creating work conditions that are conducive to skill development (Gallie 2007). Compared with LMEs, the CMEs, 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 2007).

Task discretion

Autonomy is the extent to which workers can influence their work duties, requirements, and organization. It also has a central role in the sociology of work as it is closely linked to work effort and skills. Autonomy at work or task discretion and the level of a person's skill correlate strongly. However, the possession of skills and the use of skills do not necessarily guarantee a high degree of autonomy (Dahl et al. 2009). Together with work demands, the autonomy aspect forms the core of the psychosocial models of workplace well-being; a low latitude for decision-making coupled with high demands at work is a combination that potentially increases stress levels (Karasek and Theorell 1990). Loss of employee discretion has also been found to be detrimental to work satisfaction and subjective well-being at work (Green 2006).

Recent studies are ambiguous on the development of autonomy. Contrary to expectations, opportunities for influencing one's job have been found to be declining in most of the EU (Eurofound 2012), particularly in Britain (Feldstead et al. 2007; Gallie et al. 2004; Green and Mostafa 2012) and Germany (Green and Tsitsianis 2005; Peña-Casas and Pochet 2009). However, contrasting results have been found in the Nordic countries where modest increases in task discretion have been reported (Johnson et al. 2009; Lehto and Sutela 2005; Peña-Casas and Pochet 2009).

Some evidence that demonstrates that national employment systems have an influence on worker autonomy has been found. 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 2007b). Employee discretion varies according to managerial cultures. The quality of work–life policies adopted from the 1970s onward in Sweden—and to a lesser extent in other Nordic countries—included efforts to redesign jobs in order to enrich them (Green 2006).

Work intensity

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 the consequent heightened demand it makes of workers to keep up with skill requirements is seen as a factor that increases work pressure, especially in combination with worries over job security (Gallie 2005; Green 2006). 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 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). This phenomenon, termed work intensification, which has its roots in effort-biased technological and organizational changes (Green 2006), is a critical factor behind changes in overall job satisfaction.

For Green (2006, 46), the concept of work effort "is the rate of physical and/or mental input to work tasks during the work day." The 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 desirable (Gershuny 2005).

Several empirical studies show that despite falling hours of work, employees in the EU suffer from an increasing intensity of work (Burchell et al. 2009; Clark 2005; Green and McIntosh 2001; Green and Mostafa 2012). Green and McIntosh (2001) studied change in work effort from 1990 to 1995, reporting intensification in all 12 EU countries, although there were differences in the intensity of the change. More recent data reveal diverging developments: in most of the Southern European and Nordic countries, work effort seems to have risen gradually, but in countries such as the UK, Ireland, Germany, the Netherlands, and France, work effort has started to show a declining trend (Peña-Casas and Pochet 2009).

Data and methods

Data

The empirical analyses are based on the European Working Conditions Survey (EWCS) collected in 1995, 2000, 2005, and 2010 by The European Foundation for the Improvement of Living and Working Conditions (Eurofound). The statistical population of EWCS was persons in employment according to the Eurostat Labour Force Survey criteria. 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 target number of interviews in each country has been 1000 in all surveys except in the year 2000, when it was 1500. However, there have been some exceptions from standard sample size. The sample size in Luxembourg has been lower (500–600) in surveys prior to 2010. In 2010, the UK, Italy, Germany, France, and Belgium had used increased sample size. The respondents were interviewed face-to-face in their homes outside normal working hours. The overall response rate was 44% in 2010, although there was considerable variation in the participation rates in different countries. The dataset has been weighted to correct for non-responses. The post-stratification weight is constructed to match the European Labour Force Survey figures by using gender, age, occupation, sector, and region.

The data provide a unique insight into the evolution of the conditions of work and employment in the EU. The range of countries covered in the EWCS reflects the expansion of the EU. The first wave, in 1991, covered only 12 countries; the second wave in 1995 covered 15 countries; and the third wave from 2000 to 2001 onward covered all 27 current EU member states, plus Turkey (in 2002, 2005, and 2010), Norway and Croatia (in 2005 and 2010), Switzerland (in 2005), and Albania, Montenegro, Kosovo, and the former Yugoslav Republic of Macedonia in the most recent wave. The number of questions and issues covered in the survey has been expanded for each subsequent wave. However, the survey allows for comparison over time as it retains a core of key questions, and it also permits comparison across countries because it uses the same questionnaire everywhere (Eurofound 2012).

When analyzing trends in job quality, we have to take into account previously mentioned developments in the survey, namely the progressive inclusion of new countries and the more comprehensive set of measures for job quality that have been included as the survey has developed. Most of the variables measuring different dimensions of job quality were first introduced in the second wave, which makes the 1995 survey the earliest possible starting point for our analysis (Peña-Casas and Pochet 2009). In order to provide a long-term picture, while keeping a reasonably large number of countries and measures of job quality, we restrict our analyses to employees of the 15 member states of the EU prior to enlargement in 2004 (n = 61,457). When interpreting the results, one should bear in mind that they may also depend on the timing of the last data collection point, which corresponds with the economic depression of 2010.

We classify the EU15 countries according to theories of production and employment regimes, but all of our analyses were conducted on individual countries, not regimes. This enables us to see whether countries inside these regimes are truly homogenous or not. The Nordic countries include Denmark, Finland, and Sweden. We excluded Norway from our analysis because it was included in the EWCS surveys only from 2005 onward. Liberal countries encompass the UK and Ireland. Recent studies point to clear differences between the UK and Ireland and question the validity of grouping them into the same regime (e.g., Gallie 2011). In our case, this poses no problems, since all analyses are conducted for individual countries. Belgium, Germany, France, Luxembourg, the Netherlands, and Austria are classified as belonging to the Continental regime. Finally, the Southern regime comprises Greece, Spain, Italy, and Portugal. This clustering of countries is widely used but also much criticized since it tends to mask the internal diversity in the groups.

Methods

Comparing countries or regimes by use of only raw figures on dimensions of job quality is not satisfactory for the purpose of our analysis. Any observed difference can be partly explained by compositional differences between countries in occupational structure, sector, industry, etc. In order to take into account these compositional differences between countries, we use multivariate regression models to analyze country effects on dimensions of job quality separately for each survey year. Depending on the nature of the dependent job quality measure, we employ either linear or logistic regression models with country dummies as explanatory factors. Entering age, gender, occupation, sector, and industry dummies as covariates in the regression models allows us to compare differences in job quality between countries' net of structural differences. This strategy has been previously used in the analysis of country differences and trends in job quality (e.g., Gallie 2003; 2005; Green and McIntosh 2001; Green and Mostafa 2012).

There is, however, one drawback with this analysis strategy, namely the difficulty of selecting valid reference country to which other countries are compared. For example, Gallie (2003) used Belgium as the reference country and coefficients of country effects in his analysis indicate whether or not job quality in a particular country was of higher or lower quality than in Belgium. Whether or not Belgium is the most suitable country to compare others with can be questioned. However, by using different coding schemes for country effects, the problem of selecting a valid country as a reference could be avoided.

Thus, instead of a conventional simple or dummy coding, we use deviation contrast or effects coding. In effects coding, each country other than the excluded country is compared with the unweighted average of all groups. In case of logistic regression, it measures the deviation of the logit from each group from the unweighted average logit for the entire sample (Menard 2009; Wendorf 2004). Thus, effects coding enables us to formally test whether Nordic countries have indeed retained their advantageous position in job quality compared with other EU countries on average. In addition, by using this coding scheme, we are actually analyzing the relative position on Nordic countries regardless of the actual level of each measure of job quality. As in all coding schemes of categorical variables, one country has to be left out as a "reference." Contrary to standard dummy coding, in effects coding this category can be one we are least interested in. In our analysis, Ireland is left out because of its ambiguous position considering different regimes, i.e., whether or not it should be included in the Liberal regime together with the UK (e.g., Gallie 2011). Positive coefficients indicate better job quality than in EU15 on average, except for work intensity.

As noted above, some countries have had smaller or bigger sample sizes than the standard sample size of 1000 persons. Because differences in sample size affect the significance tests, we rescaled weights so that effective sample size is 1000 respondents in each country per survey year. This procedure makes the coefficients of country effects comparable between different survey years and countries.

Measures of job quality

To capture the level of *skill requirements* in job, an index summarizing the use of different cognitive skills was created. From the survey, we included three questions: whether

or not a respondent's job involves solving unforeseen problems on their own, complex tasks, and the learning of new things. The skill index was formed by counting together how many different types of skill demands a respondent's job includes—the score ranges from 0 to 3. Respondents were coded as working in high-skilled jobs, if their jobs included all the above-mentioned aspects of skill demands (skill index score 3).

The questionnaire included three indicators that ask a worker to describe their influence and control over their work process, i.e., *task discretion*. Respondents were asked whether or not they were 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 by counting how many times the respondent answered "yes" to these questions (i.e., an indicator represents values as measured from a low of 0 to a high of 3). Employees that were able to influence all three aspects of autonomy in their work (a score of 3) were defined as having "high work discretion."

To describe the experiences of the *intensity of the work*, the respondents were asked to evaluate to what extent their job required "working at very high speed" and "working to tight deadlines." Response categories were 1 = never to 7 = all of the time. Together these two questions form an effort indicator with a range of 1 to 7. The reliability of the scale was reasonably good, producing a Cronbach's alpha of 0.71.

The unadjusted country levels of all three measures by survey year are represented in Appendix 1.

Results

The level of job quality in 1995–2010

Skill requirements

Table 1 shows the development of country differences regarding high skill level between 1995 and 2010 after adjusting for compositional effects, i.e., the characteristics of employees. Nordic countries indeed score above average on prevalence of high skill level in every survey, as would be expected from regime theories. However, Austria which is usually defined as belonging to the continental regime scores equally high as Nordic countries. The Liberal regime, i.e., the UK, also scored high in the 1990s on skill requirements, as did the Netherlands from the Continental regime. Interestingly, in 1995, the UK together with Finland and Sweden scored higher than Denmark in skill requirements. In 2010, Denmark, in contrast, differed from other Nordic countries due to its higher skill level. Countries belonging to the Southern regime have quite uniformly had lowest levels of skill requirements for the whole of the 1995 to 2010 period. This result clearly points to the existence of quite a homogenous Southern regime.

According to these results, there is clear indication of the existence of a distinct Nordic cluster with high skill level of employees. However, Austria is no different from this regime. In addition, the UK and the Netherlands from the Continental regime have lost somewhat their previously high skill level and are now at a lower skill level than the Nordic countries. On the whole, the Continental regime seems to be quite heterogenous when considering the skill level of employees. These results are somewhat in contrast to the expectations derived from production regime theories, i.e., that there is sharp

Table 1 Country effects on skill requirements from logistic regression analysis[1].

Regime and country		Survey year			
		1995	2000	2005	2010
Nordic	Denmark	0.21**	0.55***	0.90***	0.78***
	Finland	0.60***	0.52***	0.48***	0.36***
	Sweden	0.62***	0.25***	0.34***	0.42***
Continental	Austria	0.46***	0.53***	0.53***	0.70***
	Belgium	–0.43***	–0.19*	–0.16*	–0.21**
	France	0.07	–0.08	–0.12	–0.37***
	Germany	0.17*	0.18*	–0.03	0.12
	Luxembourg	–0.11	–0.15*	–0.03	0.08
	The Netherlands	0.25***	0.39***	0.34***	–0.11
Liberal	United Kingdom	0.69***	0.35***	–0.09	0.24**
Southern	Greece	–0.84***	–0.82***	–0.59***	–0.55***
	Italy	–0.40***	–0.56***	–0.53***	–0.73***
	Portugal	–0.49***	–0.44***	–0.21**	–0.17*
	Spain	–0.71***	–0.40***	–0.64***	–0.52***
Nagelkerke R^2		0.18	0.19	0.22	0.22
Weighted *N*		11,359	12,252	12,014	12,094

[1] Controlling for age, sex, occupation, sector, and industry.
The coefficients are deviations from the unweighted average logit of all countries (excluding Ireland).
Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

distinction between LMEs and CMEs such as Nordic countries in skill formation systems (e.g., Gallie 2007a). By contrast, the Southern regime with its lower level of vocational training (Davoine et al. 2008) drags behind the rest of Europe in abilities to use skills.

Task discretion

After adjusting for differences in the structural characteristics of employees, we find no indication of distinct Nordic cluster with a high level of task discretion (Table 2). Denmark has had the highest levels of autonomy for the whole observation period, but Finland has caught up with Denmark during the last five years. In contrast, task discretion seems to be lower in Sweden, after a clear decline between the last two surveys. In 2000 and 2005, Sweden scored higher than Finland on task discretion. In addition to Sweden, there was a decline in task discretion in the Liberal regime, i.e., the UK. This result is in line with studies that have addressed opportunities to influence work and found that this has been in decline in the Liberal regime countries (Feldsted et al. 2007; Gallie et al. 2004). Some countries belonging to the Continental cluster also score above average in task discretion, namely the Netherlands, Belgium, and recently also Luxembourg.

Table 2 Country effects on task discretion from logistic regression analysis[1].

Regime and country		Survey year			
		1995	2000	2005	2010
Nordic	Denmark	0.61***	0.69***	0.73***	0.84***
	Finland	0.11	0.09	0.12	0.66***
	Sweden	0.07	0.21**	0.29***	–0.14*
Continental	Austria	–0.23**	–0.03	–0.19*	–0.46***
	Belgium	0.22**	0.01	0.32***	0.11
	France	0.24**	0.04	0.12	–0.23**
	Germany	–0.27***	–0.05	–0.35***	–0.16*
	Luxembourg	–0.06	–0.15*	0.10	0.18**
	The Netherlands	0.42***	0.59***	0.20**	0.17*
Liberal	United Kingdom	0.29***	0.12	0.05	–0.04
Southern	Greece	–0.71***	–0.76***	–0.59***	–0.61***
	Italy	–0.40***	–0.18*	–0.42***	0.29***
	Portugal	0.03	–0.11	–0.17*	–0.06
	Spain	–0.31***	–0.30***	–0.30***	–0.25***
Nagelkerke R^2		0.09	0.10	0.11	0.11
Weighted *N*		11,358	12,251	12,014	12,095

[1] Controlling for age, sex, occupation, sector, and industry.
The coefficients are deviations from the unweighted average logit of all countries (excluding Ireland).
Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

However, there is considerable fluctuation between survey years in countries' relative position in task discretion. Presently there seems to be clear polarization between countries with regard to worker autonomy; Denmark and Finland form a high autonomy cluster and the rest of the EU15 countries are far behind. However, some of the changes between the last two waves of the survey are very dramatic and cast some doubts on the reliability of the data. Especially the sharply contrasting trend in Finland and Sweden needs more thorough investigation.[1] The same holds also for the surprising increase in task discretion in Italy. In addition, combining task discretion and skills to one index masks clear differences between countries in these dimensions (see Green and Mostafa 2012).

Work intensity

In general, high work intensity has been a more common feature in the Nordic countries, but only in Finland and Sweden (Table 3). In Denmark, work intensity has been no higher than the average European level. In contrast, Austria and Germany have had

Table 3 Country effects on work intensity from OLS regression analysis[1].

Regime and country		Survey year			
		1995	2000	2005	2010
Nordic	Denmark	0.10	–0.08	0.51***	–0.05
	Finland	0.81***	0.55***	0.57***	0.29***
	Sweden	0.44***	0.78***	0.57***	0.42***
Continental	Austria	0.78***	0.20**	0.39***	0.23***
	Belgium	–0.59***	–0.36***	–0.32***	–0.22**
	France	–0.27***	–0.18**	–0.36***	–0.09
	Germany	0.30***	0.14*	0.28***	0.35***
	Luxembourg	–0.62***	–0.25***	–0.29***	–0.13*
	The Netherlands	0.12*	0.31***	–0.25***	–0.10
Liberal	United Kingdom	0.42***	0.12	–0.18**	0.00
Southern	Greece	0.12	0.16*	0.46***	0.43***
	Italy	–0.62***	–0.15*	–0.01	–0.15*
	Portugal	–0.32***	–0.73***	–0.61***	–0.83***
	Spain	–0.64***	–0.46***	–0.24***	–0.36***
R^2		0.09	0.06	0.07	0.06
Weighted *N*		11,683	11,415	11,960	10,979

[1]Controlling for age, sex, occupation, sector, and industry.
The coefficients are deviations from the unweighted mean of all countries (excluding Ireland).
Statistical significance: *p<0.05, **p<0.01, ***p<0.001.

work intensity at level comparable to Sweden and Finland. Work intensity has been the lowest in countries belonging to the Southern regime for the whole period. Also Belgium, France, and Luxembourg have had low levels of work intensity. Interestingly, work intensity relative to the average level has been steadily increasing in Greece for the whole observation period. In 2010, work intensity in Greece was as high as in Germany or Sweden. Contrary to the theory of production regimes, work intensity is higher in Nordic countries with higher employment protection and stronger unions. In contrast, work intensity was no different from the European average in the UK, which is considered to be a typical example of liberal policy orientation to employment regulation, tighter management control, and weaker trade unions.

Again, there is no clear indication of distinct Nordic cluster in the level of work intensity. Despite some contrasting trends, there have been only minor changes in the relative position of the countries or regimes regarding the level of work intensity. However, there are again surprising changes in some countries' relative positions between different surveys. The most obvious example of this is the sudden peak of work intensity in Denmark in 2005. Again, this finding casts doubts on the reliability of the EWCS data on some countries and variables.

Summary and conclusions

Job quality is a multidimensional phenomenon, which touches on a broad set of individual job and workers' characteristics. In this study, we follow the tradition of the multidimensional approach to job quality. Here we look more closely at some key indicators of job quality, namely skill requirements, task discretion, and work intensity. Previous empirical research has pointed out that Nordic countries distinguish from the rest of the Europe in terms of job quality. Comparative research literature tries to explain the distinctiveness of Scandinavian countries with diverse sets of institutional frameworks such as the political and historical compromises on industrial relations together with societal welfare institutions such as family, educational, and security systems. On the other hand, it has been debated whether, in the longer run, the Nordic welfare state is able to insulate workers from the effects of globalization. The aim of this article was to investigate whether the Nordic countries have retained their advantageous position concerning job quality compared with other EU countries by 2010. In general, our results speak in favor of societal effects on job quality even after controlling for differences in compositional factors. These findings are in contrast to Smith et al. (2008), who conclude that gender and occupational status along with job characteristics like working time and economic sector are more significant factors than national or country-specific models for an individual's job quality.

Our results corroborate the findings of a great deal of previous research showing that Nordic countries have the highest proportion of workers whose job includes creative elements. As expected by Gallie (2011), the Nordic societies, which are closer to the inclusive employment regime model, remain relatively distinct in terms of the quality of work from the Continental societies, which are closest in their pattern of employment regulation to the dualistic regime model. The "learning" forms of work organization, drawing on employees' capacity for continuous learning and problem solving, are found to be widely diffused in the Nordic countries. Although we controlled for some compositional factors, the differences may derive from different degrees to which national producers are positioned on the high-technology or high-quality end of product markets (Lorenz and Valeyre 2005). Our results indicate also substantial variation between country clusters in job quality.

However, we found clear differences between Nordic countries for both current levels and long-term trends with regard to various dimensions of job quality. Denmark appears to stand out from the rest of Europe, including other Nordic countries, with very high levels of job quality. In this regard, Southern European countries represent the lower end of the job quality. However, the other EU Nordic countries, i.e., Sweden and Finland, are, in many respects, not different from some of the continental countries, especially Austria and the Liberal UK. These results are basically in line with earlier studies indicating that liberal economies are converging with coordinated economies, such as the Nordic countries, on some dimensions of job quality (Davoine et al. 2008; Olsen et al. 2010; Peña-Casas and Pochet 2009). These convergences are due to both the degradation of job quality in some Nordic countries and an improvement in the Liberal regime (cp. Olsen et al. 2010). Our findings are also in line with Gallie (2011) and challenge the existence of separate Liberal cluster including Ireland. However, different measures give quite a contrasting picture of country differences in job quality.

Following hypotheses derived from production regime theory, CMEs would foster and require higher skills compared with LMEs. Our results showed, however, that the

skill requirements are at a lower level in "coordinated Germany" compared with "liberal UK." Interestingly, the analysis showed that the assumptions relating to high levels of task discretion in Nordic countries and respectively low levels in liberal cluster are partly misleading. The level of task discretion has been and stayed at a very high level in Denmark, but Finland and Sweden are not so different from liberal and some continental countries. The analysis of task discretion shows a negative trend also in some of the Continental countries. This leads us to question the dominance of post-bureaucratic forms of work organization. The observed stagnation, or even reduction, in task discretion could be attributed to new and subtle forms of work control and the rediscovery of Fordist principles, resulting in the loss of employee autonomy. New "neo-Fordist" managerial strategies might lead to stricter supervisory, peer, and technical control and thus result in a loss of employee task discretion (Gallie et al. 2004) and increased stress (Kalleberg et al. 2009; White et al. 2003). Therefore, managerial cultures and ways of controlling the work process should be emphasized in further research.

Based on regime theories, we expected that work intensity would be at a higher level in countries belonging to LMEs or market employment regime, namely the UK, which are characterized by liberal policy orientation to employment regulation, tighter management control, and weaker trade unions. This was not the case, however. In contrast, the levels of work intensity were highest in the Nordic countries, excluding Denmark. In the UK, the work intensity was near the European average. High level of unionization or employment protection in Sweden and Finland has not resulted in reduced work intensity, quite the contrary. Clearly, neither employment nor production regime theory is capable of explaining persisting differences between European countries in work intensity. In contrast, results to some extent support the argument that higher skill levels and grater job control are actually associated with high work intensity (see Gallie 2005). The need to learn new tasks and the increased responsibilities of employees in Nordic countries are coupled with more work intensity. However, an interesting question is what causes the sharp difference in work intensity between employees in Denmark and other Nordic countries.

The empirical findings in this article show that within Europe there are variations between and within regimes with respect to levels of job quality. Thus, the implications of the economic processes are not likely to be similar across capitalist societies. The analysis shows that current assumptions about the impact of "globalization" on job quality and the decline in the significance of the nation state may be exaggerated. The comparative approach with crude country clusters tends to mask internal variation within clusters, and indeed, there is a lot of variation within each regime.

All in all, our central finding is that the Nordic countries have retained their distinctive position relative to all other country groups. As stated by Gallie (2011), the pursuit of strong policies of employee welfare, supported by a high degree of institutionalization of joint regulation both at the national level and in the workplace, is the most plausible explanation of the sources of their comparative advantage. However, maintaining a distinct quality of work life in Northern European countries is not self-evident. National institutional structures, such as education system and collective labor agreements that have supported the work–life developments, are themselves subjected to change pressures. For example, in Sweden, researchers have pointed out that a weakening welfare state is no longer able to produce positive effects to work life (e.g., Huzzard 2003). Hence, there is need for continuous attention to work–life development and research in Nordic countries.

Appendix 1 Level of job quality indicators by country and survey year (EWCS)

Measure	Regime	Country	Survey year			
			1995	2000	2005	2010
High skill requirements (%)	Nordic	Denmark	52%	56%	68%	66%
		Finland	64%	60%	63%	57%
		Sweden	63%	51%	61%	60%
	Continental	Austria	55%	58%	62%	61%
		Belgium	40%	41%	46%	46%
		France	48%	43%	44%	42%
		Germany	53%	49%	50%	52%
		Luxembourg	45%	42%	54%	56%
		The Netherlands	54%	56%	60%	50%
	Liberal	United Kingdom	64%	53%	48%	53%
		Ireland	43%	44%	48%	48%
	Southern	Greece	28%	26%	38%	36%
		Italy	38%	34%	40%	34%
		Portugal	30%	29%	41%	39%
		Spain	30%	35%	32%	36%
High task discretion (%)	Nordic	Denmark	65%	65%	66%	70%
		Finland	57%	54%	53%	66%
		Sweden	56%	56%	58%	50%
	Continental	Austria	46%	50%	49%	41%
		Belgium	62%	54%	59%	56%
		France	58%	51%	54%	48%
		Germany	46%	50%	42%	46%
		Luxembourg	52%	47%	55%	58%
		The Netherlands	64%	65%	58%	58%
	Liberal	United Kingdom	60%	55%	53%	55%
		Ireland	56%	50%	57%	49%
	Southern	Greece	52%	46%	46%	51%
		Italy	53%	51%	52%	60%
		Portugal	58%	49%	48%	52%
		Spain	50%	46%	44%	48%
Work intensity (scale: 1 = low to 7 = high)	Nordic	Denmark	3.5	3.4	4.2	3.5
		Finland	4.1	4.0	4.2	3.9
		Sweden	3.8	4.2	4.2	4.0
	Continental	Austria	4.3	3.8	4.1	3.8
		Belgium	2.9	3.2	3.6	3.4
		France	3.2	3.4	3.3	3.6
		Germany	3.7	3.7	4.0	3.9
		Luxembourg	2.7	3.2	3.4	3.4
		The Netherlands	3.6	3.8	3.4	3.5
	Liberal	United Kingdom	3.9	3.7	3.5	3.5
		Ireland	3.2	3.5	3.2	3.8
	Southern	Greece	3.5	3.7	4.2	4.0
		Italy	2.9	3.4	3.6	3.5
		Portugal	3.1	2.8	3.2	2.7
		Spain	2.9	3.0	3.6	3.3

References

Bosch, G., Rubery, J., & Lehndorff, S. (2007). European employment models under pressure to change. *International Labour Review,* 146(3–4): 253–277.

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.

Burgoon, B., & Raess, D. (2009). Globalization and working time: Working hours and flexibility in Germany. *Politics & Society*, 37(4): 554–575.

Clark, A. (2005). Your money or your life: Changing job quality in OECD countries. *British Journal of Industrial Relations*, 43(3): 377–400.

Dahl, S.-Å., Nesheim, T., & Olsen, K. (2009). Quality of work—concept and measurement. In: Guillén, A. M., & Dahl, S.-Å. (eds.) *Quality of Work in the European Union. Concepts, Data and Debates from a Transnational Perspective (19–40)*. Brussels: Peter Lang.

Davoine, L., Ehrel, C., & Guergoat-Lariviere, M. (2008). Monitoring quality in work: European employment strategy indicators and beyond. *International Labour Review*, 147(2–3): 163–198.

Esping-Andersen, G. (1990). *Three Worlds of the Welfare Capitalism*. Oxford, Polity Press.

Esping-Andersen, G. (1999). *Social foundations of postindustrial economies*. Oxford: Oxford University Press.

Eurofound (2012). *Fifth European Working Conditions Survey*, Publications Office of the European Union, Luxembourg.

European Commission (2008). Employment in Europe 2008. EC: Luxembourg.

Feldstead, A., Gallie, D., Green, F., & Zhou, Y. (2007) *Skills at Work, 1986 to 2006*. Universities of Oxford and Cardiff: ESRC Centre on Skills, Knowledge and Organisational performance.

Ferrera, M. (1996). The "Southern model" of welfare in social Europe. *Journal of European Social Policy*, 6(1): 17–37.

Gallie, D. (2003). The quality of working life: Is Scandinavia different? *European Sociological Review*, 19(1): 61–79.

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, employment regimes and the quality of work. In: Gallie, D. (ed.). *Employment Regimes and the Quality of Work* (pp. 1–33). New York: Oxford University Press.

Gallie, D. (2007b). Production regimes and the quality of employment in Europe. *Annual Review of Sociology*, 33: 85–104.

Gallie, D. (2007c). Welfare regimes, employment systems and job preference orientations. *European Sociological Review*, 23(3): 279–293.

Gallie, D. (2011) *Production Regimes, Employee Job Control and Skill Development*, published by the Centre for Learning and Life Chances in Knowledge Economies and Societies.

Gallie, D., Feldstead, A., & Green, F. (2004). Changing patterns of task discretion in Britain. *Work, Employment & Society*, 18: 243–266.

Gershuny, J. (2005). Busyness as the badge of honor for the new superordinate working class. *Social Research*, 72(2): 287–314.

Green, F. (2006). *Demanding Work. The Paradox of Job Quality in the Affluent Economy.* Princeton and Oxford: Princeton University Press.

Green, F., & McIntosh, S. (2001). The intensification of work in Europe. *Labour Economics*, 8: 291–308.

Green, F., & Mostafa, T. (2012). *Trends in Job Quality in Europe*. Publications Office of the European Union, Luxembourg.
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. (eds.) (2001) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press.
Hartikainen, A., Anttila, T., Oinas, T., & Nätti, J. (2010). Is Finland different? Job quality among Finnish and European employees. *Research on Finnish Society*, 3: 29–41.
Hult, C., and Svallfors, S. (2002). Production regimes and work orientations: A comparison of six western countries. *European Sociological Review*, 18: 315–331.
Huzzard, T. (2003). The Convergence of the Quality of Working Life and Competitiveness: A Current Swedish Literature Review. Work Life in Transition. 2003: 9. Stockholm. National Institute for Working Life.
Johnson, P., Wood, G., Brewster, C., & Brookes, M. (2009). The rise of post-bureaucracy: Theorists' fancy or organisational praxis? *International Sociology*, 24(1): 37–61.
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.
Kalleberg, A., Nesheim, T. & Olsen, K. (2009). Is Participation Good or Bad for the Workers? Effects of Autonomy, Consultation, and Teamwork on Stress among Workers in Norway. *Acta Sociologica,* 52(2): 99–116.
Karasek, R., & Theorell, T. (1990). *Healthy Work: Stress Productivity and the Reconstruction of Working Life*. New York: Basic Books.
Kerkhofs, M., Chung, H., & Ester, P. (2008). Working time flexibility across Europe: A typology using firm-level data. *Industrial Relations Journal*, 39(6): 569–585.
Lehto, A.-M., & Sutela, H. (2005). *Threats and Opportunities: Findings of Finnish Quality of Working life Surveys 1977–2003*. Helsinki: Statistics Finland.
Lewis, J. (1992). Gender and the development of welfare regimes. *Journal of European Social Policy*, 2(3): 159–173.
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.
Menard, S. (2009). *Logistic Regression: From Introductory to Advanced Concepts and Applications*. Thousand Oaks, CA: Sage.
Olsen, K., Kalleberg, A., & Nesheim, T. (2010). Perceived job quality in the United States, Great Britain, Norway and West Germany 1989–2005. *European Journal of Industrial Relations*, 16(3): 221–240.
Parent-Thirion, A., Fernández Macías, E., 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.
Pascall, G., & Kwak, A. (2005). *Gender Regimes in Transition in Central and Eastern Europe*. Bristol: Policy 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.
Smith, M., Burchell, B., Fagan, C., & O'Brien, C. (2008). Job quality in Europe. *Industrial Relations Journal*, 39(6): 586–603.

Soskice, D. (1999). Divergent production regimes: Coordinated and uncoordinated market economies in the 1980s and 1990s. In: Kitschelt, H., Lange, P., Marks, G., & Stephens, J. D. (eds.) *Continuity and Change in Contemporary Capitalism (pp. 101–134)*. Cambridge: Cambridge University Press.

Soskice D (2005). Varieties of Capitalism and Cross-National Gender Differences. *Social Politics* 12 (2): 170–179.

Tangian, A. (2007). Is Work in Europe Decent? A Study Based on the 4th European Survey of Working Conditions 2005. Diskussionspapier Nr. 157. WSI in der Hans Böckler Stiftung.

Tåhlin, M. (2007). Skills and wages in European labour markets: Structure and change. In: Gallie, D. (ed.) *Employment Regimes and the Quality of Work* (pp. 35–76). New York: Oxford University Press.

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.

Wendorf, C. A. (2004). Primer on multiple regression coding: Common forms and the additional case of repeated contrasts. *Understanding Statistics*, 3(1): 47–57.

White, M., Hill, S., McGovern, P., Mills, C., & Smeaton, D. (2003). 'High-Performance' Management Practices, Working Hours and Work-Life Balance, *British Journal of Industrial Relations*, 41(2): 175–195.

End notes

[1] We repeated our analyses with each of the three questions forming a task discretion index (whether or not they were able to choose or change the order of their tasks, the methods of work, and the speed or rate of work). The decline in Sweden between last two waves was evident for all three questions. The increase of task discretion in Finland was also evident for all three measures, but it was especially strong with regard to ability to change the speed of work.

III

JOB QUALITY TRENDS IN EUROPE – IMPLICATIONS FOR WORK-LIFE BALANCE

by

Mustosmäki, A., Anttila, T., Oinas, T. and Nätti, J. (2011)

In: Drobnič, S. & Guillèn, A. (Eds.) Work-Life Balance in Europe. The Role of Job Quality. Palgrave Macmillan

IV

ABATING INEQUALITIES? JOB QUALITY AT THE INTERSECTION OF OCCUPATIONAL POSITION AND GENDER IN FINLAND 1977-2013

by

Mustosmäki, A., Oinas, T., Anttila, T. & Nätti, J. (2016)

Acta Sociologica, Published online ahead of print.

Article

Acta Sociologica
1–18

DOI: 10.1177/0001699316657580
asj.sagepub.com
SAGE

Abating inequalities? Job quality at the intersection of class and gender in Finland 1977–2013

Armi Mustosmäki
University of Jyväskylä, Finland

Tomi Oinas
University of Jyväskylä, Finland

Timo Anttila
University of Jyväskylä, Finland

Abstract

Globalization with its many side-effects on working life is seen to pose accentuated risks especially for women and low skilled workers – resulting in increasing polarization of job quality. In contrast to "universal theories", institutional theories claim changes in work life might vary according to the institutional and cultural frameworks which mediate the global pressures of change. This study analyses job quality trends in Finland at the intersection of class and gender. The results, based on the Finnish Quality of Work Life survey (1977–2013), find no clear evidence of polarization. In line with the institutional theory's prediction of a low risk of polarization in coordinated and inclusive Nordic countries, improvements have occurred for blue-collar workers in terms of autonomy and opportunities for development at work, reducing the gap between social classes. Furthermore, the negative sides of work life, such as insecurity and time pressures have become common experiences regardless of social class. The 'welfare state paradox' hypothesis on the comparative disadvantage of women in higher positions in the labour market does not gain support in 2013: the upper-white collar women have attained roughly similar levels of job quality to their male counterparts.

Keywords

Job quality, working conditions, Finland, trend analysis, occupation

Corresponding Author:
Armi Mustosmäki, Department of Social Sciences and Philosophy, University of Jyväskylä, PO Box 35, Jyväskylä, FI-40014, Finland.
Email: armi.mustosmaki@jyu.fi

Introduction

The rise of the knowledge society, the technological change, and tertiarization are seen to affect the well-being of the workforce, especially posing risks for women and low skilled workers (see e.g. Gallie, 2013; Green et al., 2013). In contrast, the highly educated have been seen to be insulated from the degradation of job quality (Clark, 2005). In consequence, the gap between men and women in different class positions is expected to grow, resulting in the increasing polarization of job quality.

And indeed, polarizing developments between employees in different class positions have been reported according to many aspects of work life. According to several studies, there has been growth in employment in both the highest- and lowest-skilled occupations, with declining employment in the middle of the skill distribution, which is also reflected as polarizing wage levels (Fernández-Macías et al., 2012; Goos and Manning, 2007; Tåhlin, 2007). Furthermore, polarization has been observed in terms of skill development and task discretion afforded to employees (for the UK, see Feldsted et al., 2007; Gallie, 2007b; Green et el., 2013; for the US, see Kalleberg, 2011).

In contrast to "universal theories" of change in work life, institutional theories, such as production and employment regime theories (e.g. Gallie, 2007a, Hall and Soskice, 2001) discuss how job quality trends as well as polarization risks differ depending on the institutional contexts. This claim has been supported by comparative studies which find the risk of polarization both in terms of employment structures as well as quality of jobs was low in the inclusive economies of Nordic countries (Eurofound, 2013; Gallie, 2007c, 2013; Green et al., 2013). Controversially, notable gender gaps, according to various work life indicators like wages, job authority and quality of jobs, have been found in the Nordic countries, despite them being regarded as female friendly welfare states (e.g. Gallie, 2007c, 2013; Mandel, 2012; Yaish and Stier, 2009)

Despite intriguing results, these previous studies have limitations: many of the studies are restricted to cross-sectional data or rather short time spans due to a lack of available data (Gallie, 2007c, 2013; Holman, 2013a, 2013b; Stier and Yaish, 2014), and thus provide only limited possibilities to make conclusions on long-term polarizing developments or other trends. Furthermore, critically evaluating the research settings in studies that tackle inequalities reveals shortages because class and gender have been treated as two autonomous domains of inequality. It has been established that studies concentrating on inequality between genders might obscure inequalities among women in different class positions (e.g. Korpi , 2000; Mandel, 2012; McCall, 2001). Despite various calls for intersectional perspectives when conducting working life research it has yet to be sufficiently translated into empirical studies (e.g. McBride et al., 2015; Mulinari and Selberg, 2013).

The current study builds on prior work by drawing on the hypothesis on abating inequalities – in terms of the quality of jobs in Finland – from the field of institutional theory. It contributes to this field by using a unique and extensive high quality dataset, the Finnish Quality of Work Life Survey, to study the alleged polarization in work life over four decades. We investigate changes in job quality among men and women in different class positions, between 1977 and 2013. The study follows the tradition of the multidimensional approach to job quality of what makes a "good job" and what explains the roots of inequalities that are determined by other factors than just wages (e.g. Muñoz de Bustillo et al., 2011). Job quality is understood as an umbrella concept that gathers together several aspects of work life that are central to worker well-being, such as the possibility to develop and use skills at work, the level of task discretion, and work pressures and job insecurity (see also e.g. Gallie, 2007a; Green, 2006; Hauff and Kirchner, 2014; Osterman, 2013; Sengupta et al., 2009).

The next section of the article presents the institutional setting by discussing the connections of institutional theories and job quality in Finland, showing how these theories open interesting perspectives for analysing the polarization of job quality on the national level and describing the kind of developments they predict according to class and gender as well as their intersection. The data, the methodological choices and the key variables will be presented. Thereafter, we proceed to the results of

the empirical analysis: the evolution of the various aspects of job quality in Finland over the last four decades. The article concludes with a summary of the results and a discussion.

Theoretical background

Research literature on changes in work life could roughly be divided into universal and institutional theories (see Gallie, 2007c, 2013; Green et al., 2013): universal theories assume the forces of stratification in the labour markets would result in similar polarizing developments irrespective the context; and the lower skilled would suffer from the rise of the knowledge society and computerization as rising skill requirements would make lower skilled work more vulnerable as the lower skilled would assumingly face difficulties in assimilating new technology. Restructuration of the economy and offshoring of production has made many jobs and professions vulnerable to dumping of working conditions in developed countries. Furthermore, the process of post-industrialism (economic restructuring) intensifies gender segregation and inequality as it confines women into service and care jobs (Dwyer, 2013; Webb, 2010). These developments would lead into increasing polarization of quality of jobs. In contrast, institutional theories, which will be further developed in the next section, introduce diverging views by explaining why polarization risks do not necessarily materialize in all political economies.

Institutions shaping quality of jobs

During recent years there has been a growing interest in so-called non-pecuniary job quality. The comparative studies show that the quality of jobs is high in the Nordic countries (e.g. Green, 2006; Holman, 2013a, 2013b; Oinas et al., 2012; Olsen et al., 2010), a result which has been shown to be associated with specific institutional arrangements, such as strong unionization (Esser and Olsen, 2012).

Furthermore, (labour market) institutions coordinating the markets are seen to explain the low polarization risks in the Nordic countries. More specifically, a hypothesis on the low risk of polarization in Finnish work life can be drawn from institutional literature and mainly from production regime theories, such as the varieties of capitalism (VoC) tradition by Hall and Soskice (2001) and the employment regimes, which take into account the power of organized labour (see e.g. Gallie, 2007; Korpi, 2006). The Nordic countries are considered typical examples of coordinated market economies (CMEs). CMEs emphasize product market strategies based on complex 'diversified quality products' that increase the demand for specific skills (Gallie, 2003, 2007a). This is supported by a strong vocational training system. The Nordic type of CME may also be called "state-led social partnership skill systems" (Green, 2013) as the government plays a rather central role both in adult education and training as well as in initial education. In the Nordic type of CME the companies are encouraged (by institutional regulation, but also by their own high quality product strategies) to have a long-term perspective in terms of financing, investment and relationships with their employees. In other words, the risks of polarization between high- and low-skilled workers would be minor due to the employer strategies and institutional factors mentioned above. Thus, the specialized skills required for a coordinated economy would be supported and needed across the workforce, resulting in a higher quality of work life with a higher prevalence of new forms of work organization, higher autonomy and better decision-making responsibilities also among the low-skilled (Gallie, 2007a).

Similar outcomes are predicted according to employment regime theories, which also take into account power relations between the employers and employees, and the state as a mediator (Gallie, 2007a; see also Korpi, 2006); Nordic countries represent an *inclusive employment system* aimed at protecting the rights of workers in general. The role of organized labour is highly institutionalized and the large public sector offers both employment and work–family policies to support employment.

In the institutional framework a practical example of the special power relations and thus worth mentioning are the specific work life programmes that were developed in the Nordic countries since the 1970s. The development programmes were driven by national policies, unions as well as employers, and

aimed at improving learning possibilities and the organization of work, including both the physical as well the psychological conditions of work (Elvander, 2002; Gallie, 2003; Gustavsen, 2007). Efforts were targeted to improve the quality of work of the low-skilled and to provide more effective ladders for skill enhancement (e.g. Gallie, 2002). Consequently, these policies and programmes might have contributed to lower polarization risk in the Nordic countries.

Gender inequality and job quality: the adverse effects of institutions

Earlier comparative research has pointed out that class equality is sometimes achieved at the expense of gender equality (e.g. Cooke, 2011). Although, as noted above, the risk of class polarization has been found to be low, the gender gap according to skills, autonomy and job security was found to be most pronounced in Sweden when compared to similar political economies, such as Germany (Gallie, 2007c). Whereas women in Finland have exceeded men in terms of educational attainment and employment rates (Sutela and Lehto, 2014: 17–19), the gender gap in terms of pay (especially among the higher skilled) and job authority remain comparatively high in Nordic countries (Evertsson et al., 2009; Mandel, 2012; Mandel and Shalev , 2009b; Sutela and Lehto, 2014: 191; Yaish and Stier, 2009).

Consequently, it has been discussed how the welfare institutions might affect the employment of females in unpredictable ways. For instance, production regime theories assume that an emphasis on skill formation systems and employer strategies could have rather different implications for men and women. Estévez-Abe (2005) has argued that women in coordinated economies, such as Finland, would be disadvantaged in the labour market compared to men. The argument is that an emphasis on specific skills would lead to the discrimination of women, especially in private sector jobs, as employers would be reluctant to invest in the training of employees who would be likely to have career interruptions for maternity leave or work shorter hours due to their family responsibilities. Moreover, strong employment protection (as well as the generous family benefit policies) characteristic of the Nordic countries tend to intensify employer discrimination against women (Mandel and Shalev, 2009a). The strong employment protection constrains employers' possibilities to lay-off, but this means employers also have difficulty in finding temporary replacements for employees on family leaves due to the specificity of the skills required. Hence, extended maternity leaves are seen as especially damaging to women's employment in economies reliant on specific skills.

This controversial phenomenon has been identified as the "welfare state paradox" (Mandel and Semyonov, 2006) because the social democratic type of work–family policies considered female-friendly are also considered to have harmful side-effects. Although generous welfare state policies facilitate female access to the labour force by creating public sector jobs and by providing employment protection and childcare, they do not facilitate entry to the private sector and high-quality, high-skills positions. In consequence, the labour markets would be distinguished into occupations and sectors that are characterized by high levels of female employment and those in which women struggle to achieve good quality jobs. Critics point out that strict employment protection as well as regulations imposed by strong unions benefits the careers of females and their quality of employment, preventing them from becoming labour market outsiders (Rubery, 2011). In addition, generous work–family policies such as affordable, good quality, public child care facilitate women's continuous employment (e.g. Dieckhoff et al., 2015; Steiber and Haas, 2012) and should reduce employer discrimination against them in the Nordic countries. Societal changes, such as changing values towards gender equity (Scott, 2006) and increasing participation of men in household work and childcare (Pääkkönen and Hanifi, 2011) together with institutional efforts towards gender mainstreaming as well as creating family policies targeted explicitly to fathers could be expected to reduce gender differences in work life over time. However, women are still the main users of the family leaves and others claim that extensive work–family policies are most often (explicitly or implicitly) targeted towards women, thus reinforcing the cultural image of women as mothers and primary caregivers, whilst damaging the image of mothers being also workers (see also Ellingsaeter, 2013), which increases the gap between men and women in work life.

Job quality at the intersection of class and gender

In addition to separately considering the class polarization risks and the gendered implications of the institutional frame, it has been suggested that production strategies and skill specificity have different implications for women who occupy different class positions (e.g. Estevéz-Abe, 2009; Mandel, 2012; Mandel and Shalev, 2009a). According to this idea, it is women at the higher end of the skill continuum that are in an unfavourable position in the Nordic countries.

More specifically, although the expectation of the discrimination of employers against females can be connected to the behaviour of women as a group, class also matters. Positions involving high training costs can be assumed to be mostly given to stable and productive workers, meaning that highly skilled women would be disadvantaged in competing for good quality jobs. Furthermore, employers should have less of a reason to discriminate against women when considering them for low-skilled jobs as the costs for replacing and training the employee are not as high (Estévez-Abe, 2009; Mandel, 2012). Consequently, class and gender can be expected to interact so that the gender gap in terms of job quality would be higher among the high-skilled and less pronounced among the low-skilled. In contrast, women in lower echelon jobs would benefit from the regulations and strength of the organized labour as it is mainly in the lower skilled jobs where the regulations make a difference.

The VoC argument and its ''feminist and classed'' perspective have also been challenged. Edlund and Grönlund (2008) have questioned whether strict employment protection actually leads into gender discrimination. They argue how, although employees in the Nordic countries possess considerable firm specific skills in terms of tenure and on-the-job training (i.e. time required to learn to do the job well), employers do not seem to experience any greater difficulties in replacing their employees if they left. In addition, gender and class differences in tenure in Nordic countries are negligible (Edlund and Grönlund, 2008); furthermore, according to Webb (2010) Swedish women have not demonstrated greater difficulties in accessing higher occupational positions compared to the UK. Consequently, it could be interpreted that employers possibly do not treat these groups very differently.

The research hypothesis

To summarize, the aim of this paper is to find out how job quality has developed in Finland over the past five decades among different groups of employees. Thus we ask if the ''universal predictions'' of polarization have occurred or has the institutional framework managed to prevent the inequalities from growing larger? Following production and employment regime frameworks (which are supported by earlier research) the risk of class polarization in Finland is expected to be low, whereas the gender inequality is expected to be rather high. Furthermore, the intersection between class and gender is expected to result in an even wider gap between high-skilled men and women compared to those in lower skilled occupations.

Institutional theories, such as production and employment regimes, have been successfully used as a framework for comparative studies, thus providing support for the idea that the cross-national variation in job quality is a result of institutional differences (e.g. Esser and Olsen, 2012; Holman, 2013a, 2013b; Olsen et al., 2010). As this study concentrates only on analysing the case of Finland and is not comparative by nature, institutional theory is employed to highlight the specificities of the Nordic labour market and its possible effects on the dispersion of the quality of jobs among different groups of employees.

Data, measures and methods

Data

The empirical analyses are based on the pooled data of seven cross-sectional Finnish Quality of Work Life Surveys (1977, 1984, 1990, 1997, 2003, 2008 and 2013) which were carried out by Statistics

Finland. The Quality of Work Life Survey (QWLS) is an extensive personal interview survey conducted to monitor employees' working conditions and changes in them. The data are collected through face-to-face interviews using a standardized questionnaire. The sample is obtained from the participants in the Labour Force Survey by choosing either employed persons or wage and salary earners. Between 3,000 and 5,800 people were interviewed in each survey round. The response rate in the QWLS has varied between 91 and 69 per cent with a declining trend. The analysis is restricted to employees from 15 to 64 of years of age.

We use the standard classification of socio-economic status defined by Statistics Finland as a measure for individual social class. The classification takes account of a person's occupation and employment status, and is supplemented by divisions describing the nature of occupation and industry. The Finnish official socio-economic classification is an evolved version of the old Nordic socio-economic classification, but with a stronger emphasis on skill differences and educational requirements. In general, the Finnish classification may be interpreted similarly to the Erikson–Goldthorpe classification. For the purposes of this study, social class is classified into three groups of employees: (1) blue-collar workers; (2) lower white-collar workers; and (3) upper white-collar workers. In a 2013 survey, major occupations of the upper white-collar group were professionals (90%) and to a lesser degree managers (9%); the lower white collar group includes technicians and associate professionals (48%), service and sales workers (35%), and clerical support workers (17%); and the blue-collar group consists mainly of craft and related trades workers (35%), plant or machine operators and assemblers (24%), elementary occupations (18%), and service and sales workers (14%). The change in the production and educational structure resulted in major changes in employment structures during the QWLS period and a marked increase in white-collar wage and salary earners.

Dimensions of job quality and measures

There is no single definition or way to measure job quality. Economists tend to define job quality in terms of pay, while polarization is understood as the growing gap between high- and low-paid jobs. Nevertheless, in this paper the approach to the quality of work is sociological; therefore, the definition of job quality is broader, including a range of job features. This study concentrates on measuring job quality, namely employee experiences at the level of the job, compared to wider labour market conditions, such as the unemployment rate or the level of social protection (e.g. Muñoz de Bustillo et al., 2011).

Possibilities for skill development. Training days provided by the employer in the year prior to the survey was chosen as the objective measure of possibilities for skill development. The indicator of participation in training is an average of training days, including "zero-answers", that is, those who did not receive any training. To evaluate the subjective experience of the skills development aspect, workers were asked if they assessed their opportunities for self-development as good, fair or poor. The original scale was further recoded into a dichotomy (good vs fair or poor). The question was not in the survey of 1984, but the analysis was conducted for all the other surveys.

Autonomy. The extent to which employees have an influence on their jobs is assessed with one measure. The dataset includes six questions that describe perceived autonomy, that is, a worker's own influence and control over the work process. Respondents were asked the following questions: are you able to influence (a lot, quite a lot, a little or not at all) the content of your tasks; the order in which you do your tasks; the pace of your work; your working methods; the division of tasks between employees; who you work with? The scale varies between 1 and 4, recoded as higher values to represent higher autonomy. The Alpha reliability coefficient for the scale was 0.806 and every item increases it. The question on autonomy has been in the survey since 1984.

Work effort. To describe the subjective experiences of the intensity of work, an indicator of time pressures was employed. Workers were asked to indicate adverse factors present in their work environment and also to assess the extent to which the burden in question affected their work. One of the possible adverse factors was ''time pressure and tight time schedules''. For the descriptive analysis, the original 5-point scale was recoded so that the respondents who assessed time pressures as disturbing their work very much or quite a lot, were combined into the category termed ''high work effort'' and compared to the rest.

Insecurity. The subjective perception of insecurity is simply measured with one question: Does your work carry any of the following insecurity factors: threat of a temporary dismissal; threat of dismissal; threat of unemployment? A respondent was counted as insecure when answering ''yes'' to any of the categories.

Methods

The empirical analyses are conducted by using various methods. First, the figures are used to gain an overall picture of the development of various job quality measures in different groups. In this descriptive analysis we employ combined classifications of gender and social class. The figures are based on mean comparisons and cross tabulations and they are presented in order to see where and what kind of change has happened over time. Second, the change in the hypothesized gender gap and the polarization between occupational positions is tested with cross-product terms in a linear regression model with controls. We employ linear models for both continuous and binary variables (linear probability model [LPM]). The LPM has some clear advantages over logistic regression and other nonlinear models which are further clarified below.

The LPM is simply standard linear regression used to analyse the binary dependent variable. Three issues are generally related to using linear models for binary data: (1) the possibility of predicted probability falling outside the 0 to 1 range; (2) heteroscedastic and non-normal residuals leading to inflated standard errors; and (3) misspecified functional form. However, these issues are not as serious as it is often claimed (see Hellevik, 2009; Mood, 2010). In contrast, LPMs have some clear advantages over logistic regression and other nonlinear models. Coefficients from a LPM may be interpreted as the difference in probability for having a certain value on the dependent variable for units with different values on an independent variable. Also, in LPMs coefficients are comparable over models, groups, and time; which is not the case with logistic regression (see Mood, 2010). The effect estimates of LPM are in fact unbiased and consistent estimates of a variables average the effect on probability of the event studied.

As hypotheses of development of gender and occupational differences are rather simple, that is, strengthening or weakening of these differences, we use survey year as linear period effect in regression models. This way results are easily interpretable, especially with regards to interaction effects. Significant interaction effect of gender with linearly coded survey year indicates, depending on the slope and intercept, either strengthening or weakening of gender differences. The same applies to differences between socio-economic groups. However, linear trend does miss information on periodical variation in trend caused by, for example, changes in economic situation. As we are addressing only general trends of increasing or decreasing differentiation, the simplification of these more nuanced periodical changes is necessary.

Results

The results are presented for each job quality aspect separately, leaving the summary until the discussion. Figures 1 to 5 depict the overall uncontrolled development in the dimensions of job quality by combining gender and social class.

In Finland there have been major changes in the working population during the last three decades. The most notable changes have been the steep rise in the level of education, especially for women, and population ageing influenced by a particularly large baby boom cohort (see Supplementary Material). As it is important to take these changes into account we added measures of education, age-group, family status and employment sector into the models as controls in addition to gender and class. Controlling for these factors enables us to obtain a more reliable trend of development in job quality.

Regression analyses on the overall linear change in each job quality measure and the significance of gender and class differences in this general trend after controlling for changes in employment structure is presented in Supplementary Table 1. There were statistically significant three-level interactions between gender, class and survey year with regard to all job quality aspects except for autonomy. These interactions give reason to look more closely into the development of the inequalities and interpret the trends; therefore, in Table 1 we present intercepts and slopes derived from regression analyses for each job quality measure by gender and class. Together with interaction terms the group-level intercept (i.e. initial status) at 1977 and the slope (i.e. linear change) during the observation period (1977–2013), provide clear interpretation as to whether or not there has been increase or decrease in gender or socio-economic differentiation with regards to job quality. Table 1 will be employed to support the analysis and interpretation of the descriptive trends of each job quality aspect presented in Figures 1, 2, 3, 4 and 5.

Possibilities for skill development: participation in training provided by the employer

Access to training is, and has been, very tightly linked to social class (Figure 1): in 1977–1990 male blue-collar employees received less than two days of training during the year prior to the survey, whereas male employees in lower white-collar positions 4 days and upper white-collar workers over 7 days (Figure 1). The class differentials were highest in 1984 and 1990 before the economic crisis hit Finland after which especially the upper white-collar men have gradually lost their advantage. Convergence between social classes is mainly due to this development. Although the differences between the classes have diminished, on average white-collar employees participated in training three days more than blue-collar workers in 2013.

The gender gap is evident and persistent in access to training (Figure 1). In general, men got more in-house training than women in all social classes but the training possibilities for white-collar women have improved since the 1980s. After 2008 there has been a general decline in training possibilities for both men and women in all social classes, most likely linked to economic recession. In line with the VoC prediction, upper white-collar women suffered from comparative disadvantage during the 1970s and 1980s, but the gap has reduced significantly and in 2013 upper white-collar women participated in training at similar frequencies to those of their male counterparts. For blue-collar workers the gender gap has been small but persistent in favour of men. In contrast, the gender gap in training seems widest in the lower white-collar employees' category and has clearly declined slower than for upper white-collar workers.

Results from regression analysis with linear period effect and controls for structural change mainly support descriptive results (Table 1 and Supplementary Table 1). There was evidence of gender-convergence only in white-collar employees. The main cause for this was decrease in men's training days. With regards class differences the main result is of persistent differences for women. For men the clear drop in upper white-collar training days has decreased the class differences to some degree.

Possibilities for skill development: subjective evaluation

The main result is towards convergence between the social classes (Figure 2). The descriptive results reveal that the convergence is due to the marked improvement in the development opportunities of manual workers and women in intermediate and upper positions. The development opportunities of male professionals have not improved over time. Despite the positive trend among lower-skilled workers,

Table 1. Trend of job quality measures during 1977–2013 in Finland by gender and occupation.

		Training days/year		Development opportunities		Autonomy		Time pressure		Job insecurity	
Occupation	Gender	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope	Intercept	Slope
Blue-collar	Male	1.83	0.03	0.22	0.17***	2.13	0.34***	1.78	0.45***	0.31	<0.01
	Female	0.67	0.35	0.19	0.11***	2.00	0.30***	2.13	0.44***	0.24	0.11***
Lower white-collar	Male	3.76	-0.61	0.55	-0.02	2.50	0.03	2.02	0.13	0.17	0.06**
	Female	1.39	0.34	0.27	0.15***	2.25	0.08**	1.92	0.52***	0.18	0.16***
Upper white-collar	Male	6.22	-1.77***	0.68	-0.04	2.78	-0.21***	2.12	0.05	0.12	0.23***
	Female	2.77	0.67	0.48	0.18***	2.65	-0.07	1.79	0.34***	0.14	0.27***

Notes: Variable scales: training days 0 to 98; development opportunities 0 to 1; autonomy 1 to 4; time pressure 1 to 5; job insecurity 0 to 1.
Coefficients are unstandardized regression coefficients controlling for age-group, couple status, and presence of children, education and sector.
(*$p < 0.05$; **$p < 0.01$; ***$p < 0.001$).
Intercept refers to the initial status of job quality measures in 1977 and the slope to the linear change from 1977 to 2013.

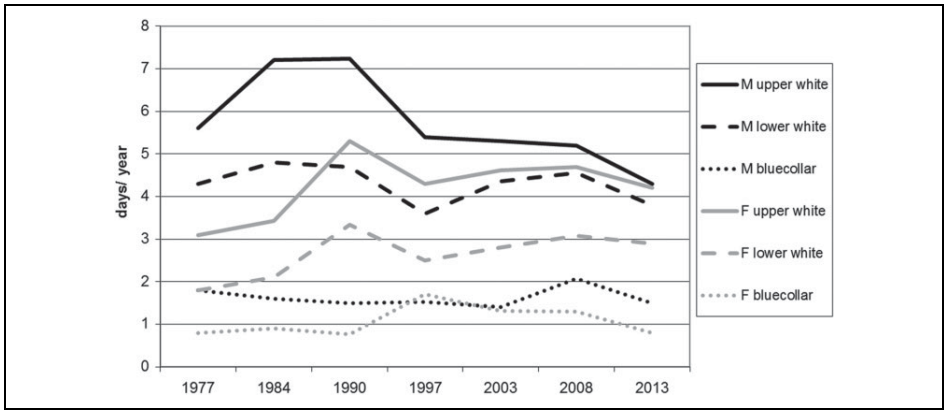


Figure 1. Training days of employees during the past 12 months by gender and occupation.

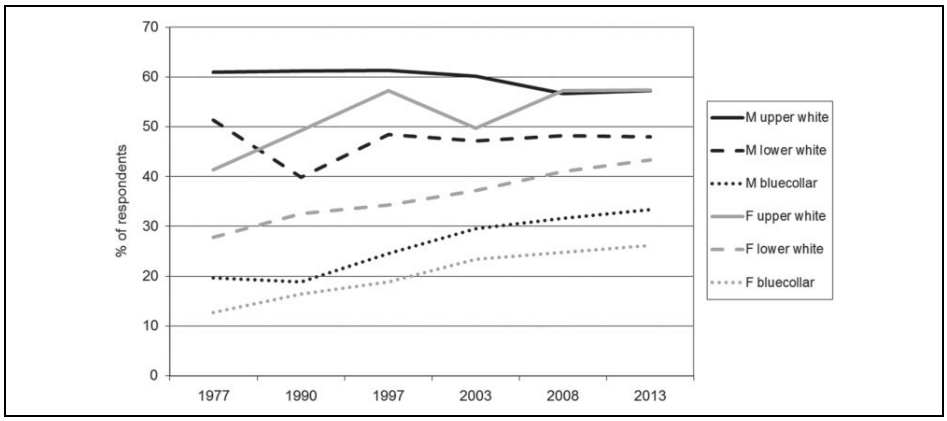


Figure 2. Percentage of employees with good development opportunities at work by gender and occupation.

development opportunities still vary greatly depending on class still in 2013. While approximately every fourth blue-collar worker rated their prospects for development as good in 2013, the same answer was given by over half of the upper white-collar workers.

Women have fewer possibilities for development than men in general, but the gender gap has disappeared over time for white-collar workers (Figure 2). The gender gap has stayed the same among blue-collar workers throughout the study period and is currently the only group where a significant gender gap is found. The hypothesis on the comparative disadvantage of higher educated women was somewhat true in the 1970s, but as the gender gap has declined over time, it has not been valid since 2008 onward.

Regression adjustment for structural changes does not alter the main results (Table 1 and Supplementary Table 1). There was an increase of development opportunities in all groups except for white-collar men. This resulted in a decrease of gender gap for white-collar employees. In the blue-collar group gender differences have stayed virtually the same for the whole observation period. The class differences

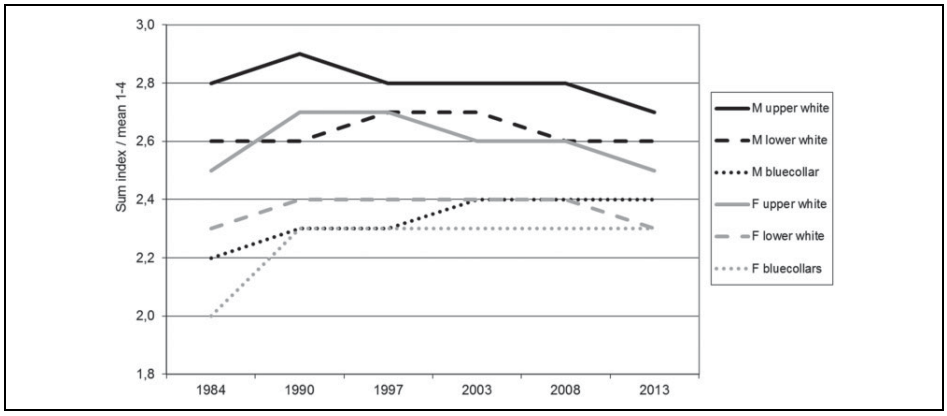


Figure 3. Level of autonomy by gender and occupation.

have stayed the same for women and decreased for men because of the improved situation of blue-collar employees.

Autonomy

With regards to the level of autonomy, the overall pattern is towards class convergence (Figure 3). The convergence between class groups is mainly explained by the rise in the level of autonomy of blue-collar workers and the decline in the amount of discretion afforded to the upper white-collar men.

Results change only little after controlling for structural differences in the working population (Table 1 and Supplementary Table 1). Regardless of the declining class gap, also in 2013 autonomy is closely linked to class and gender: upper white-collar workers have more autonomy than lower white and blue-collar workers. However, it is notable that when comparing the workers of same gender in 2013, lower white and blue-collar workers have identical levels of autonomy: blue collar and lower white collar women perceive their autonomy rather similarly as do blue collar and lower white collar men. In other words, gender gap is more persistent than class difference in these groups. Although in 2013 men are more likely to perceive more autonomy than women in blue collar and lower white collar groups, upper white collar women have reached the same level of autonomy as their male counterparts (Table 1).

Time pressures

The intensification of work is evident in Finland. The amount of employees reporting time pressures and working to tight schedules as disturbing factors rose remarkably in all social classes during the 1980s and 1990s, after which it started to slowly decrease but mainly in jobs occupied by men (Figure 4).

Growing work pressures are not inherently attached to social class in Finland, since according to the descriptive analyses none of the social classes has been saved from intensification (Figure 4). It is evident that time pressures have become more of problem for female employees in all classes whereas male employees would be moving towards the levels of intensity experienced during the 1970s and 1980s.

Regression adjustment does not change the results considerably (Table 1 and Supplementary Table 1) although this strategy hides some of the variation between different time points (the peaks). It is evident that work intensity has increased for women in all classes, whereas the long-term trend for white-collar men does not show significant changes. However, in contrast to the descriptive analysis in Figure 4

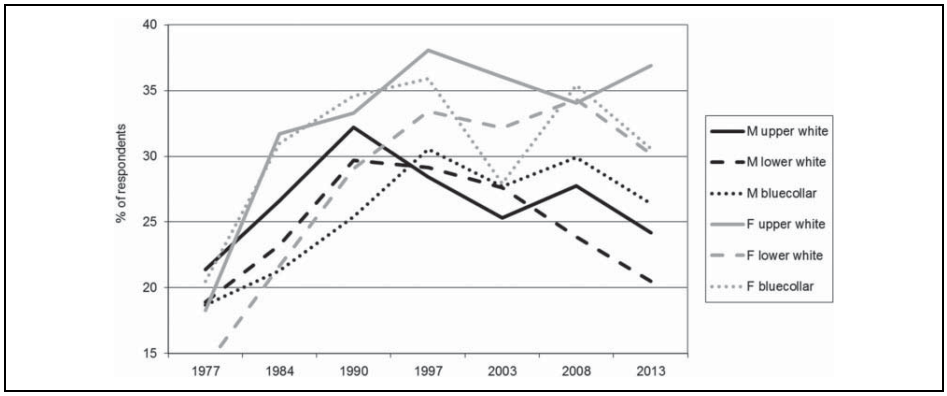


Figure 4. Time pressure and tight deadlines as adverse factors at work by gender and occupation.

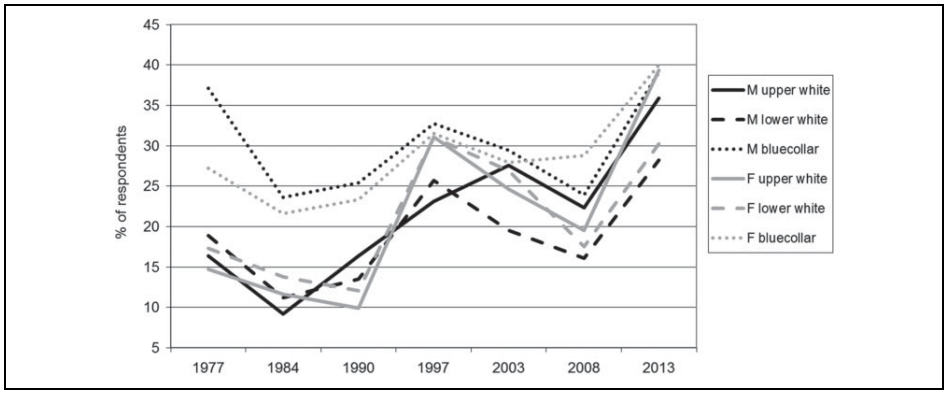


Figure 5. Perceived job insecurity by gender and occupation.

controlling for various individual and structural factors alters the picture regarding the assumed disadvantage of higher white-collar women as according to regression models in 2013 they experience similar levels of time pressure to their male counterparts. For the men only group the blue collar employees are experiencing long term intensification.

Insecurity

The measure reflecting job insecurity as perceived by employees seems to be tightly related to the situation of the national economy. Subjective insecurity for most employee groups was on a low level during the years of intense economic growth in the 1980s but increased drastically after the 1990s deep recession and mass unemployment, and even more during the economic crisis since 2008 (Figure 5). Until 1990 job insecurity was more closely related to social class and more of a problem for blue-collar employees. The recession of the 1990s has made job insecurity more or less a commonly shared experience for employees in all classes.

Nevertheless, the gender gap has been quite small for the entire observation period (Figure 5). In 1977, blue-collar men experienced a little more insecurity than blue-collar women, but the situation has reversed by 2013. In contrast, upper and lower white-collar women experienced rather similar levels of job insecurity with their male counterparts, both in the 1970s and 2013.

Results from regression models confirm the descriptive results (Table 1 and Supplementary Table 1). There has been a significant increase in subjective job insecurity in all groups except for blue-collar males for whom the experience of insecurity was very common already in 1977. In 2013 it was the upper white-collar women who experienced insecurity most often. In fact, women face the threat of unemployment or dismissal most often in all social classes. There is indication of gender convergence in blue-collar and divergence in lower-white collar groups. In both cases the main reason was the larger increase of subjective job insecurity for women. Class differences have decreased for both women and men, but the change is more evident for men. The main reason for class convergence is the relatively strong increase of job insecurity for upper white-collar employees.

Conclusion

This study has concentrated on analysing whether risks for polarization in terms of quality of jobs have materialized in Finland. Compared to earlier research settings, our study relies on an exceptionally long time series and high-quality dataset, while simultaneously looking at the developments in a broad range of job quality measures. Contrary to the expectations defined by the universal theories on increasing disadvantage of lower skilled workers, the analyses reveal that improvements have occurred for blue-collar workers in terms of autonomy and opportunities for development at work, reducing the gap between social classes – a result which is consistent with the institutional theory's prediction of a low risk of polarization in coordinated and inclusive Nordic countries (Gallie, 2007a). Results are also in line with earlier comparative research pointing towards low class (skill) inequality in job quality in regulated Nordic countries compared to liberal economies reporting higher inequality and polarization based on skill levels (see e.g. Esser and Olsen, 2012; Gallie, 2007c, 2013; Green et al., 2013; Stier, 2015). The result is also in line with the argument that especially the lower skilled would benefit from provision of services and the protection provided by institutions (e.g. Mandel, 2012; Soskice, 2005).

On the other hand, it seems that institutions, such as trade unions, have not been able to insulate employees from negative trends of work life. Nor were white-collar employees safe from the intensification of work or rising insecurity as some researchers envisaged. Insecurity and time pressures have become common experiences, regardless of the social class. The results of the growing insecurity among various employee groups across countries resonates with other recent research in the field of precarization, which has recognized that job insecurity has spread also into the more highly educated segments of the labour force across countries (e.g. Häusermann et al., 2015; Lempiäinen, 2015; Solheim and Leiulfsrud, 2015). Consequently, this pattern is not specifically Nordic. Yet several studies have pointed out that job security is still on a higher level in Nordic countries compared to more flexible labour markets (e.g. Gash and Inanc, 2013; Stier, 2015).

Noteworthy is also the finding on degradation of job quality experienced by upper white-collar men. Earlier research has reported declining trends for the high skilled in the UK in terms of training possibilities (Green et al., 2016a) as well as job autonomy (Gallie et al., 2004; Green et al., 2016b). According to Green et al. (2016b) the declining trend could not be accounted for by any of the individual or job characteristics available in the data, a result which points towards trends in management culture in explaining these changes.

Looking at the gender gap in more detail, one of our main results is clearly against the assumptions of the welfare state paradox: by 2013 upper white-collar women have attained the same level of job quality as their male counterparts. Consequently, we could conclude that the hypothesis on the comparative disadvantage of higher skilled women did hold true earlier in 1977 but not in 2013. Thus we do not have reason to believe that the framework the Finnish welfare state provides, does not hinder women from

accessing and working in high quality jobs. It is noteworthy that whether this hypothesis gains support or not, is also dependent on the time point of the research. Thus, the results also highlight the importance of longitudinal research as well as further (comparative) research to see whether this pattern is universal or Nordic.

However, the gender gap persists tightly between the blue and lower white-collar men and women with respect to all measured aspects of job quality: *in general* men have better opportunities for development, influence on their work and on-the-job-training than their female counterparts, which is also in line with VoC theorization on gender inequality (e.g. Estévez-Abe, 2005) as well as earlier research on persistent gender gap in job quality (e.g. Gallie, 2007c). It is possible that the gender gap, for instance in work intensification, would be explained by occupational segregation as previous research has indicated that time pressures are most prevalent in health care, education and social work as well as in the local government sectors, which are female dominated branches (e.g. Sutela and Lehto, 2014). Those sectors have faced cost reduction pressures due to the problems of public financing, while working conditions have deteriorated, for instance, by not hiring substitutes.

Further, when considering the large gender gap, for instance in the lower white-collar group, it should be noted that this group consists of heterogeneous occupations, part of which could also be defined as highly skilled employees as many had tertiary education (such as nurses and engineers). These differences might be partly due to the research technical issues and problems related to the different classifications. The deep occupational segregation of the Finnish labour markets leads to a setting where we are actually comparing employees in rather different jobs: for instance policemen, engineers, nurses, and women in various clerical and service jobs. Consequently one possible avenue for future research in inequalities in job quality would be to study the intersection of occupation and gender at the level of jobs (see e.g. Emslie et al., 1999).

What remained beyond the scope of this study is the preferences of women in how they participate in the labour market (see e.g. Hakim, 2000) and whether these individual choices enforce the gender gap in job quality. The theories this paper has drawn from aim at explaining the structures in which women make their choices. In other words, it concentrates on how institutional framework, welfare policies and the actions of employers frame possibilities and achievement for females in the labour market, but it does not touch on the effect of women's choices and preferences within education and the labour market and how those choices affect job quality. Support for the explanatory power of institutional theories has been found. For instance, Stier and Yaish (2014) found that the gender gap in job quality would not be due to women's preference and occupational choices but rather the result of discrimination on the demand side. A more complete understanding of the mechanics that create inequalities in the labour market could be gained by combining an analysis of structural conditions with individual preferences and behaviours.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: Research was supported by the Finnish Work Environment Fund and Labournet – The Finnish Doctoral Program on Labour and Welfare Studies.

Supplemental material

The online [appendices/data supplements/etc.] are available at http://asj.sagepub.com/supplemental.

References

Clark A (2005) Your money or your life: changing job quality in OECD countries. *British Journal of Industrial Relations* 43(3): 377–400.

Cooke L (2011) *Gender–Class Equality in Political Economies*. Abingdon, UK: Routledge.

Dieckhoff M, Gash V and Steiber N (2015) Measuring the effect of institutional change on gender inequality in the labour market. *Research in Social Stratification and Mobility* 39(1): 59–75.

Dwyer R (2013) The care economy? Gender, economic restructuring and job polarization in the U.S. labor market. *American Sociological Review* 78(3): 390–416.

Edlund J and Grönlund A (2008) Protection of mutual interests? Employment protection and skill formation in different labour market regimes. *European Journal of Industrial Relations* 14(3): 245–264.

Ellingsæter A-L (2013) Scandinavian welfare states and gender (de) segregation: recent trends and processes. *Economic and Industrial Democracy* 34(3): 501–518.

Elvander N (2002) The labour market regimes in the Nordic countries: a comparative analysis. *Scandinavian Political Studies* 25(2): 117–137.

Emslie C, Hunt K and Macintyre S (1999) 'Gender' or 'job' differences? Working conditions amongst men and women in white-collar occupations. *Work, Employment & Society* 13(4): 711–729.

Esser I and Olsen K (2012) Perceived job quality: autonomy and job security within a multi-level framework. *European Sociological Review* 28(4): 443–454.

Estévez-Abe M (2005) Gender bias in skills and social policies: the varieties of capitalism perspective on sex segregation. *Social Politics: International Studies in Gender, State & Society* 12(2): 180–215.

Estévez-Abe M (2009) Gender, inequality, and capitalism: the 'varieties of capitalism' and women. *Social Politics: International Studies in Gender, State & Society* 16(2): 182–191.

Eurofound (2013) *Employment Polarisation and Job Quality in the Crisis: European Jobs Monitor 2013*. Dublin, Ireland: Eurofound.

Evertsson M, England P, Mooi-Reci I, et al. (2009) Is gender inequality greater at lower or higher educational levels? Common patterns in the Netherlands, Sweden and the United States. *Social Politics: International Studies in Gender, State & Society* 16(2): 210–210.

Feldsted A, Gallie D, Green F, et al. (2007) *Skills at Work, 1986 to 2006*. Oxford, UK: ESRC Centre on Skills, Knowledge and Organisational Performance.

Fernández-Macías E, Hurley J and Storrie D (eds) (2012) *Transformation of the Employment Structure in the EU and USA, 1995–2007*. Basingstoke, UK: Palgrave Macmillan.

Gallie D (2002) The quality of working life in welfare strategy. In: Esping-Andersen G, et al. (eds) *Why We Need a New Welfare State*. Oxford, UK: Oxford University Press, pp.96–129.

Gallie D (2003) The quality of working life: is Scandinavia different? *European Sociological Review* 19(1): 61–79.

Gallie D, Felstead A and Green F (2004) Changing patterns of task discretion in Britain. *Work, Employment & Society* 18(2): 243–266.

Gallie D (2007a) Production regimes, employment regimes and the quality of work. In: Gallie D (ed.) *Employment Regimes and the Quality of Work*. New York, NY: Oxford University Press, pp.1–34.

Gallie D (2007b) Task discretion and job quality. In: Gallie D (ed.) *Employment Regimes and the Quality of Work*. New York, NY: Oxford University Press, pp.105–136.

Gallie D (ed.) (2007c) *Employment Regimes and the Quality of Work*. New York, NY: Oxford University Press.

Gallie D (ed.) (2013) *Economic Crisis, Quality of Work & Social Integration: The European Experience*. Oxford, UK: Oxford University Press.

Gash V and Inanc H (2013) Insecurity and the peripheral workforce. In: Gallie D (ed.) *Economic Crisis, Quality of Work & Social Integration: The European Experience*. Oxford, UK: Oxford University Press, pp.142–168.

Goos M and Manning A (2007) Lousy and lovely jobs: the rising polarization of work in Britain. *The Review of Economics and Statistics* 89(1): 118–133.

Green F (2006) *Demanding Work: The Paradox of Job Quality in the Affluent Economy*. Princeton, NJ: Princeton University Press.

Green F (2013) *Skills and Skilled Work: An Economic and Social Analysis*. Oxford, UK: Oxford University Press.

Green F, Mostafa T, Parent-Thirion A, et al. (2013) Is job quality becoming more unequal? *Industrial & Labor Relations Review* 66(4): 753–784.

Green F, Felstead A, Gallie D, et al. (2016a) The declining volume of workers' training in Britain. *British Journal of Industrial Relations* 54(2): 422–448.

Green F, Felstead A, Gallie D, et al. (2016b) Skills and work organisation in Britain: a quarter century of change. *Journal for Labour Market Research*. First Online: 15 February 2016. DOI: 10.1007/s12651-016-0197-x.

Gustavsen B (2007) Work organization and 'the Scandinavian Model'. *Economic and Industrial Democracy* 28(4): 650–671.

Hakim C (2000) *Work-lifestyle Choices in the 21st Century: Preference Theory*. New York: Oxford University Press.

Hall P and Soskice D (2001) An Introduction to Varieties of Capitalism. In: Hall P and Soskice D (eds) *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford, UK: Oxford University Press, pp.1–68.

Hauff S and Kirchner S (2014) Cross-National Differences and Trends in Job Quality – A Literature Review and Research Agenda. Diskussionspapiere der Universität Hamburg. Nr. 13/2014. Available at: https://www.bwl.uni-hamburg.de/pw/team/hauff-sven/pdfs/hauff-kirchner-2014-review-job-quality.pdf (accessed 7 April 2015).

Häusermann S, Kurer T and Schwander H (2015) High-skilled outsiders? Labor market vulnerability, education and welfare state preferences. *Socio-Economic Review* 13(2): 235–258.

Hellevik O (2009) Linear versus logistic regression when the dependent variable is a dichotomy. *Quality and Quantity* 43(1): 59–74.

Holman D (2013a) Job types and job quality in Europe. *Human Relations* 66(4): 475–502.

Holman D (2013b) An explanation of cross-national variation in call centre job quality using institutional theory. *Work, Employment, & Society* 27(1): 21–38.

Kalleberg A (2011) *Good Jobs, Bad Jobs: The Rise of Polarized and Precarious Employment Systems in the United States, 1970s to 2000s*. New York, NY: Russell Sage Foundation.

Korpi W (2000) Faces of inequality: gender, class, and patterns of inequalities in different types of welfare states. *Social Politics: International Studies in Gender, State & Society* 7(2): 127–191.

Korpi W (2006) Power resources and employer-centered approaches in explanations of welfare states and varieties of capitalism: protagonists, consenters and antagonists. *World Politics* 58(2): 167–206.

Lempiäinen K (2015) Precariousness in academia: the prospects of employment in changing universities. In: Porta D, Hänninen S, Siisiäinen M, et al. (eds) *The New Social Division: Making and Unmaking Precariousness*. Basingstoke, UK: Palgrave Macmillan, pp.123–138.

Mandel H (2012) Winners and losers: the consequences of welfare state policy for gender wage inequality. *European Sociological Review* 28(2): 241–262.

Mandel H and Semyonov M (2006) A welfare state paradox: state interventions and women's employment opportunities in 22 countries. *American Journal of Sociology* 111(6): 1910–1949.

Mandel H and Shalev M (2009a) Gender, class, and varieties of capitalism. *Social Politics: International Studies in Gender, State & Society* 16(2): 161–181.

Mandel H and Shalev M (2009b) How welfare states shape the gender pay gap: a theoretical and comparative analysis. *Social Forces* 87(4): 1873–1911.

McCall L (2001) *Complex Inequality: Gender, Class and Race in the New Economy*. New York, NY: Routledge.

McBride A, Hebson G and Holgate J (2015) Intersectionality: are we taking enough notice in the field of work and employment relations? *Work, Employment and Society* 29(2): 331–341.

Mood C (2010) Logistic regression: why we cannot do what we think we can do, and what we can do about it. *European Sociological Review* 26(1): 67–82.

Mulinari P and Selberg R (2013) Intersectional directions in working life research: a proposal. *Nordic Journal of Working Life Studies* 3(3): 81–98.

Muñoz de Bustillo R, Fernández-Macías E, Antón J-I, et al. (2011) *Measuring More than Money: The Social Economics of Job Quality*. Cheltenham, UK: Edward Elgar.

Oinas T, Anttila T, Mustosmäki A, et al. (2012) The Nordic difference: job quality in Europe 1995–2010. *Nordic Journal of Working Life Studies* 2(4): 135–152.

Olsen K, Kalleberg A and Nesheim T (2010) Perceived job quality in the United States, Great Britain, Norway and West Germany, 1989–2005. *European Journal of Industrial Relations* 16(3): 221–240.

Osterman P (2013) Introduction to the Special Issue on Job Quality: what does it mean and how might we think about It? *Industrial & Labor Relations Review* 66(4): 739–752.

Pääkkönen H and Hanifi R (2011) Ajankäytön muutokset 2000-luvulla [Changes in Time Use]. *Helsinki: Statistics Finland* [in Finnish].

Rubery J (2011) Towards a gendering of the labour market regulation debate. *Cambridge Journal of Economics* 35(6): 1103–1126.

Scott J (2006) Family and Gender Roles: How Attitudes are Changing. GeNet Working Paper No. 21 September 2006. Available at: http://www.genet.ac.uk/workpapers/GeNet2006p21.pdf (accessed 16 November 2015).

Sengupta S, Edwards PK and Tsai C-J (2009) The good, the bad, and the ordinary: work identities in 'good' and 'bad' jobs in the United Kingdom. *Work and Occupations* 36(1): 26–55.

Solheim E and Leiulfsrud H (2015) A European analysis of subsistence precarization and precarious risk. In: Porta D, Hänninen S, Siisiäinen M, et al. (eds) *The New Social Division: Making and Unmaking Precariousness*. Basingstoke, UK: Palgrave Macmillan, pp.63–82.

Soskice D (2005) Varieties of capitalism and cross-national gender differences. *Social Politics: International Studies in Gender, State & Society* 12(2): 170–179.

Stier H and Yaish M (2014) Occupational segregation and gender inequality in job quality: a multi-level approach. *Work, Employment & Society* 28(2): 225–246.

Stier H (2015) The skill-divide in job quality: a cross-national analysis of 28 countries. *Social Science Research* 49(1): 70–80.

Steiber N and Haas B (2012) Advances in explaining women's employment patterns. *Socio-Economic Review* 10(2): 343–367.

Sutela H and Lehto A-M (2014) Työolojen muutokset 1977–2013. [Changes in the working conditions 1977–2013]. Helsinki: Statistics Finland. [In Finnish.] Available at: http://www.stat.fi/tup/julkaisut/tiedostot/julkaisuluettelo/ytmv_197713_2014_12309_net.pdf (accessed 14 December 2015).

Tåhlin M (2007) Skills and wages in European labour markets: structure and change. In: Gallie D (ed.) *Employment Regimes and the Quality of Work*. New York, NY: Oxford University Press. pp.35–76.

Yaish M and Stier H (2009) Gender inequality in job authority: a cross-national comparison of 26 countries. *Work and Occupations* 36(4): 343–366.

Webb J (2010) Gender and post-industrial shift. In: Scott J, Crompton R and Lyonette C (eds) *Gender Inequalities in the 21st Century: New Barriers and Continuing Constraints*. Cheltenham, UK: Edward Elgar, pp. 85–108.

Author biographies

Armi Mustosmäki is pursuing a PhD from the University of Jyväskylä at the Department of Social Sciences and Philosophy on Finnish quality of working life in a comparative perspective. Her research interests include job quality, organization of work and work–life balance, especially in cross-national comparisons.

Tomi Oinas, PhD, works as Postdoctoral Researcher at the Department of Social Sciences and Philosophy in the University of Jyväskylä. His main research interests include job quality, working time, time pressure, time use and domestic division of labour.

Timo Anttila, PhD, is an Academy Research Fellow at the University of Jyväskylä, Finland. His publications have focused, for example, on changing working times and time use in 24/7-society and job quality in a comparative perspective. His current projects concentrate on changing organization of work in Europe, time and spaces of work and long term consequences of social isolation.

V

ENGAGED OR NOT? A COMPARATIVE STUDY ON FACTORS INDUCING WORK ENGAGEMENT IN CALL CENTER AND SERVICE SECTOR WORK

by

Mustosmäki, A., Anttila, T. & Oinas, T (2013)

Nordic Journal of Working Life Studies 3(1), 49-67.

Nordic journal of working life studies Volume 3 ▮ Number 1 ▮ February 2013

Engaged or Not? A Comparative Study on Factors Inducing Work Engagement in Call Center and Service Sector Work

▮ **Armi Mustosmäki**[1]
Researcher, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland.

▮ **Timo Anttila**[1]
Academy research fellow, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

▮ **Tomi Oinas**[1]
Post-doctoral researcher, Department of Social Sciences and Philosophy, University of Jyväskylä, Finland

ABSTRACT

The aim of this study was to compare the possibilities of experiencing positive well-being in call centers and other service sector work. The article focuses on the prevalence of working conditions (job demands, autonomy, and social support) in call centers and at other service sector workplaces and how these factors are related to work engagement. In addition, we examine whether the relationships are divergent in call centers in comparison to other service sector work. Analysis is based on the data provided by the "Quality of Life in Changing Europe" project. The survey data were collected from service sector organizations (retail, banking, and insurance) and a telecom organization's call center functions in Finland (N = 967). According to our results, work engagement in call center environment is challenging due to the strong negative effect of job demands. In general, call center employees experienced less feelings of engagement than employees in the comparison organizations. This difference remained significant even after controlling for background factors and measures of working conditions. In addition, we found significant differences between call center and other service sector organizations in the effects of both autonomy and demands. The levels of autonomy and work demands proved to be strong antecedents of perceived work engagement, especially in call center environment.

KEY WORDS

Autonomy / call center / intensity / job quality / social support / work engagement

Introduction

The shifting of varied and complex customer service delivery to call centers has been an economic success story. For example, Batt and Moynihan (2002) state that huge economies of scale have been achieved through office consolidation, service automation, and process rationalization. At the same time, a relatively large body of literature has shown that call centers are specific workplaces which incorporate work

[1] Department of Social Sciences and Philosophy, FIN-40014 University of Jyväskylä, Finland.
E-mail: armi.mustosmaki@jyu.fi

conditions that have the potential to negatively affect employee well-being. For the employees, the introduction of Taylorist forms of industrial engineering models in call center environments has meant the experiencing of a degradation in working conditions, the routinization of work processes, boredom, and increased stress, which are associated with the speeding up of job cycle times (Knights and McCabe, 1998; Taylor and Bain, 1999; Taylor et al., 2003).

Although various sociological studies have drawn attention to call centers as offering low-quality and highly controlled "sweat shop" jobs, these notions have also been criticized. The managerial perspective has recognized that call centers do not constitute a workplace entirely devoid of work interest (Rose and Wright, 2005). Call center work may offer opportunities to use various skills, such as communication skills, independent problem solving, multi-tasking, and technical knowledge (Belt et al., 2002; Russell, 2007). Furthermore, actively attending to customers and solving their problems may also be a significant source of job satisfaction (Holman, 2003). In fact, according to Holman (2002), the causes of stress and the levels of well-being of call center employees are similar to workers in comparable clerical and manufacturing jobs.

Although there has been a growing interest to study well-being in call centers, there are few studies that have paid attention to positive work attitudes (Bakker et al., 2003; Grebner et al., 2003; Holman, 2002; Holman et al., 2002; Wegge et al., 2006). Moreover, most studies have concluded that call centers are "unique workplaces" and have concentrated on studying them in isolation and not introduced a comparative element. The aim of this study is to compare the possibilities of experiencing positive well-being, measured as work engagement, in call centers and other service sector work. This article focuses on the prevalence of certain working conditions (job demands, autonomy, and social support) in call centers and at other service sector workplaces in Finland. We examine how these factors are related to work engagement and whether the relationships are divergent in call centers in comparison to other service sector work.

Call center management

The managerial perspective has recognized how employee well-being and especially their contribution and dedication have become critical business issues. Customer service agents are expected to provide high levels of satisfaction and convenience for customers and make customers feel valued (Kinnie et al., 2000). Customer satisfaction and organizational output are largely dependent on employees' discretionary efforts to comply with organizational goals. In trying to create more output with less employee input, the management has become increasingly interested in how to commit the "hearts and minds" of their employees (Ulrich, 1997; van den Broek, 2004). Accordingly, the attention of researchers has been drawn to examining human resource management issues and the problematic work attitudes prevalent in call center environments, such as absenteeism, low job satisfaction, low performance and turnover, as well as the factors predicting those behaviors (Bakker et al., 2003; Grebner et al., 2003; Hallman et al., 2008; Schalk and Van Rijckevorsel, 2007). Also, much attention has been given to factors that are related to the ill-health of call center employees (Bakker et al., 2003; Charbotel et al., 2009; Croidieu et al., 2008; Zapf et al., 2003). However, most studies have concentrated only on call centers. In fact, only a few studies have compared call center working

conditions and well-being to other types of work in order to assess whether the conditions of work in call centers are actually inferior (Grebner et al., 2003; Holman, 2002; Zapf et al., 2003). Nevertheless, very little is known about what kind of working conditions are related to positive work attitudes and well-being in the call center environment.

Work engagement and the role of job characteristics

Modern organizations expect their employees to be proactive and show initiative, take responsibility for their own professional development, and commit to high-quality performance standards. In other words, they need engaged workers (Bakker et al., 2008). This holds true for call center employees as well. In recent organization and work psychology literature, work engagement is seen as a concept that encompasses the central aspects of the positive well-being of workers (Bakker et al., 2007b).

Although there are various definitions of work engagement (or employee engagement in HR and business literature), in this study we rely on the definition supplied by Schaufeli et al. (2002)—which has been widely supported in empirical research. Work engagement is understood as being positive and fulfilling, i.e., an affective-motivational state of work-related well-being that is characterized by vigor, dedication, and absorption (Schaufeli et al., 2002). Vigor refers to energetic working, being ambitious enough to work hard, even in challenging situations. Furthermore, a dedicated worker finds the work meaningful, is inspired and proud of the work she/he does. Absorption refers to personal immersion in work, from which one gets pleasure. It also indicates that a person is concentrated on his/her work and finds it rewarding (Maslach et al., 2001).

Work engagement is not only beneficial for the well-being of the worker but also has several advantages for the functioning of an organization. Work engagement is associated with constructive behaviors such as self-initiative and independent problem solving (Salanova and Schaufeli, 2008) as well as better performance (Halbesleben, 2010; Xanthopoulou et al., 2008) and innovativeness (Schaufeli et al., 2006). Work engagement is also linked to positive work attitudes, such as commitment to an organization (Hakanen et al., 2006, 2008; Halbesleben, 2010) and lower turnover intentions (Halbesleben, 2010; Parzefall and Hakanen, 2010; Schaufeli and Bakker, 2004). Moreover, work engagement has been found to predict the service climate, which, in turn, is positively associated with employee performance and customer loyalty (Salanova et al., 2005). Work engagement has also been linked to an organization's financial profitability (Xanthopoulou et al., 2009). In addition, these processes could be beneficial for teams since the experiencing of work engagement has proven to be "contagious" between colleagues within teams (Bakker et al., 2006).

The antecedents of worker well-being

Often working conditions in call centers are evaluated as unfavorable for employee well-being and health. More specifically, according to earlier research, call centers are characterized by elements of Taylorism and its emphasis on a strict division of labor, limited complexity and variability, and low employee control over work (Callaghan and Thompson, 2001). According to Karasek's model of employee well-being, workers

working at workplaces that combine high levels of job demands and low control have increased levels of strain that may lead to stress (Karasek, 1979: 289–290). Karasek's model has since been supplemented with the dimension of social support to create the Job Demand–Control–Support model (Johnson and Hall, 1988; Karasek and Theorell, 1990). In this model, social support refers to social interaction with colleagues and supervisors. Social support is found to be a straightforward resource, in that it is functional in achieving work goals. This helps workers to maintain their motivation (Bakker and Demerouti, 2007).

More specifically, Karasek's model focuses on mental strain by looking at job demands and autonomy. Job demands refer to those psychological stress factors, such as high work pressure, emotional demands, and role ambiguity, that influence how employees manage their workloads, unexpected work tasks, or work conflicts. A job task can potentially produce psychological strain in cases where it exceeds the employee's adaptive capability. In contrast, job resources such as social support, performance feedback, and autonomy can result in a motivational process resulting in job-related learning, work engagement, and organizational commitment (e.g., Bakker and Demerouti, 2007; Demerouti et al., 2001a, 2001b; Salanova et al., 2005). Job autonomy is measured by assessing an employee's possibilities to influence his/her own work arrangements. Further, the model separates two components of job autonomy: skill discretion and decision authority. Skill discretion refers to the possibility to be creative, participate in decision making, learn new things, and use professional skills, whereas decision authority refers to the possibility to choose the way work is performed and to take part in decisions affecting work. In this article, we use the concept of autonomy to cover both daily control over work tasks and skill variety in one's job.

Although the interaction of demands and resources is often the focal point of job stress studies (e.g., Van der Doef and Maes, 1999), it has been introduced also for studies concerning positive well-being, namely work engagement (see, e.g., Bakker et al., 2007a; Hakanen et al., 2008; Mauno et al., 2007). The meta-analysis on the sources of work engagement shows that both job demands and resources are important antecedents of work engagement (Halbesleben, 2010).

Job characteristics inducing work engagement

Studies examining the antecedents of work engagement have found job resources to be the most robust predictor of experiences of work engagement (Bakker et al., 2007a, 2008; Hakanen et al. 2005; Halbesleben, 2010; Schaufeli and Bakker, 2004; Schaufeli et al., 2009). This connection has been confirmed in longitudinal studies (Hakanen et al., 2008; Mauno et al., 2007). The role of job demands in generating engagement is more ambiguous. Although balance models of employee well-being suggest that job demands could deteriorate the basis of well-being, either by reducing resources or by directly decreasing levels of well-being, this hypothesis might be too simplistic. For example, Karasek's model suggests that job demands are not necessarily harmful. Too few demands might lead to employee boredom. In contrast, some level of effort and dealing with challenges may induce motivational processes and feelings of accomplishment at work. According to Karasek's model, demands are considered detrimental only when

they exceed the employees' capabilities and are not accompanied by the resources necessary for a task. In other words, a high demand level should also be accompanied with the required amount of job resources in order to promote worker well-being. This interaction effect has gained some support with regard to work engagement. Bakker et al. (2007a) suggested that job resources as triggers of engagement become salient in the face of high job demands.

Aims, Data and Methods

Aims

In this article, we explore how work engagement varies between call center and other service sector employees and is affected by the three factors used for predicting it: demands, autonomy, and social support. In addition, we are interested in whether job quality in call centers is inferior to other service jobs, as much of the literature suggests.

The few comparative studies conducted on call centers have found that there is less variety in work tasks and work discretion given to call center employees, but that stress-inducing factors were not any higher among call center workers compared with other types of service and non-service work (Zapf et al., 2003). The study by Grebner et al. (2003) supports earlier results in terms of low autonomy and skill variety. However, they found task-related stressors, namely time pressure, to be higher among call center workers than among workers in more traditional professions (see also Holman, 2002). Additionally, many non-comparative studies have concluded that call center work environments are stressful due to the strict managerial control experienced by workers (Callaghan and Thompson, 2001; Taylor et al., 2002). Therefore, we assume that the level of job demands is higher and the level of skill variety and job autonomy is lower for call center employees when they are compared with employees working in other service sector organizations.

With regard to social relationships, call centers have been seen as exceptional workplaces. According to Deery et al. (2010), social relationships may be important in interactive service work as they might offer a defense against the abusive practices of management and, in some cases, the excessive demands of customers (see also Mulholland, 2004; Townsend, 2005). In work settings such as service work, where interaction can be intense, employees are likely to seek support from each other and the social setting in order to develop a feeling of control over their work. Hence, we expect to observe higher levels of social support among call center workers than in other service sector jobs.

In addition, we expect to find a lower level of engagement among call center employees due to the fact that earlier studies highlight the meaning of resources, and especially that of job autonomy, with regard to the emergence of feelings of engagement in work (see, e.g., Bakker and Demerouti, 2007; Hakanen and Roodt, 2010). Moreover, previous studies have found weak associations between job demands and engagement (e.g., Hakanen et al., 2008; Halbesleben, 2010). Therefore it will be interesting to see if they do have an effect in the call center environment, which has often been described as a high-pressure, low-autonomy working environment.

Survey data and the call center environment

The quantitative analysis on employee experiences is based on the data provided by the *Quality of Life in Changing Europe* (FP6) project. The survey data were collected from service sector organizations representing retail, banking and insurance, telecommunications, and public hospitals in eight European countries (Finland, Sweden, the Netherlands, Germany, the UK, Portugal, Hungary, and Bulgaria). In this study, we will concentrate only on the Finnish data ($N = 967$), which included a telecom organization's call center functions.

As the data are gathered from four work organizations, they are not representative. Among other call center studies, it has been rather common practice to collect data only from one organization. The question of representativeness is, however, important with regard to comparative research designs based on company studies. Earlier research has shown that differences between companies within the same sector may be as large as differences between different types of work in different sectors (Søderfeldt et al., 1997). Especially company-specific organizational and managerial cultures and practices may have a significant influence on perceived working conditions. Our sample of call center included just one large organization, but it was—as well as data gathering—subdivided into several local organizational units with notable organizational independence. We may expect that our call center sample represented a variety of local organizational cultures and managerial practices.

Call center sample

The analyses concerning the experience of work in the call center are based on a survey conducted in a Finnish private sector telecommunication company. Overall, 435 telecom employees and managers filled in the online questionnaire (response rate 59%). The majority of the call center employees were female (69%). Over half (59%) of the call center agents were between the ages of 20 and 34, and only 8% were 50 to 64 years old. A supervisory position was held by 10% of the respondents. Among call center workers, 67% held indefinite contracts, while only 3% had fixed term contracts; an additional 26% were employed via a temporary employment agency. Regarding their family situation, 66% of the employees were married or cohabiting and a third had children living at home.

Comparison sample

The comparison group consisted of employees ($N = 467$) working in service sector organizations, representing retail ($N = 113$), banking and insurance ($N = 218$), and health care (public hospital, $N = 164$). The response rate varied between the organizations (banking 76%; hospital 47%; retail 35%). The majority of employees gave their responses via an online questionnaire. If an employee did not use a PC in his/her daily work, paper questionnaires were distributed to him/her. Women represented the majority of service sector employees (89%). The age distribution shows that approximately a third fall into each age category (20–34, 35–49, 50–64 years). A total of 14% of all

employees held a supervisory position. The majority of service sector employees (82%) worked under indefinite contracts, whereas 17% had temporary contracts.

Call center characteristics

The call centers studied belonged to a large Finnish telecom company that operates in a fiercely competitive and rapidly changing market. Call centers are organized into specialized divisions, such as technical support, sales, billing, and customer queries. Most of the employees handle inbound calls. Only few of the services operate around the clock. Assessments of employee output and performance are highly centralized supervisory duties and quantitative measures would appear to be the most important tools. The close monitoring of the employees via strict performance targets, the taping of calls and performance competitions within and between teams coupled with constant attempts to standardize employee behavior possibly add to the stress they experience and leave very little space for the personal autonomy of the employees.

Taken as a whole, changing market orientation, widening product offerings, and quality-driven competition have started to emphasize the skills and abilities of the employees. Employees are expected to adapt to change and quickly learn details concerning new products and technologies. These skills are important not just in technical support but also in other customer service positions. Moreover, technologies related to daily work systems, such as software, are subject to constant development and change in order to facilitate and speed up work flows. These requirements to adapt to constant change pose challenges for the employees. Although these processes might be linked to enhanced variety, complexity, and higher skill levels, they possibly cause extra strain.

The general atmosphere and social relationships in the call centers under study could be described as consensual regardless of the competition within and between teams and the supervisor's role as overseer and coacher of the employees' performances. Employees belong to teams and the function of a team is not only to increase efficiency and to control employees but also to share knowledge and create groups for socializing during leisure time. Nevertheless, due to the nature of the job, work tasks are performed alone.

Key variables

Work engagement

Work engagement is a six-item averaged composite variable (M = 4.6, SD = 1.33, α = 0.950), the variance of which we try to explain in this study.[1] It is a slightly modified version of the one found in the study by Schaufeli et al. (2006). The first two components (I feel I'm bursting with energy; When I get up in the morning, I feel like going to work) are descriptive of *vigor*, the next three (I am enthusiastic about my job; My job inspires me; I am proud of the work that I do) measure job *dedication*, and the last one (I feel happy when I am working intensely) is indicative of *absorption*. The response scale of questions ranged from 1 = never to 7 = always.

Predictors of work engagement

Work demands. To measure work demands, we use an averaged sum variable (M = 2.7, SD = 0.47, α = 0.758) that is a shortened version of the multiple scale used by Karasek and Theorell (1990) in their Demand–Control–Support model. It includes five statements as follows: Does your job require you to work fast? Does your job require you to work very hard? Do you feel that your job requires too much input from you? Do you have enough time to complete your job? Does your job often make conflicting demands on you? Receiving high scores on this scale indicates that employees feel high pressure in terms of time, and physical and mental effort. The scale of questions ranged from 1 = never to 4 = always.

Work autonomy (Control over work, time, and place). Work autonomy is an averaged sum variable (M = 1.9, SD = 0.42, α = 0.757) comprised of eight statements, such as: Are you free to decide what your job involves? and Does your job require you to invent your own tasks? These statements are also adopted from Karasek and Theorell (1990). High scores on this sum variable indicate greater independence in organizing work and using skills at work. The response scale ranged from 1 = never to 4 = always.

Social support. The social support measure (M = 3.8, SD = 0.55, α = 0.676) is adopted from Karasek and Theorell (1990). In our study, it consists of five statements: There is a good spirit of unity; My colleagues are there for me; People understand that I can have a bad day; I get on well with my superiors; I get on well with my colleagues. This averaged composite variable is used to measure the general supportiveness of an organization's culture. The response scale of questions ranged from 1 = strongly agree to 5 = strongly disagree.

Other variables

In addition to work demands, autonomy, and support measures, we use control variables that are related to personal factors such as gender (dummy coded so that 0 represents men and 1 represents women), age, education (0 = less than tertiary, 1 = tertiary), married/living together (0 = no, 1 = yes), children at home (0 = no, 1 = yes), and work-related factors, such as supervisory position (0 = no, 1 = yes), and temporary contract (0 = no, 1 = yes).

Methods

Both descriptive methods and multiple regression analysis are used to study job quality in call centers and in other service sector organizations. First, descriptive methods are deployed to describe the level of job demands, job resources, and social support. Second, we use hierarchical multiple regression analysis for modeling the connections between demands, autonomy, and support for work engagement. Regression analysis is conducted separately to service sector and call center. In addition, analysis is repeated for whole sample and includes interaction terms for call center dummy with demands, autonomy, and social support.

Results

In order to observe whether the levels of work engagement as well as job demands and resources vary among call center and service sector employees, the results of the comparisons of the means are presented in Tables 1–4.

Work engagement

According to the engagement index, the possibilities of experiencing work engagement are demonstrably lower among call center workers compared with other service sector employees. The analysis of each question separately does not significantly alter the results. Employees in other service sector jobs report that they are more likely to have frequent feelings of dedication and absorption, they are more proud of the work they always do, and feel more often happy while working. In terms of vigor, the difference between the comparison groups is slightly smaller. The results show that the opportunities for engagement in call center work seem significantly lower when compared with other types of service work.

Table 1 Work engagement in call centers and other service sector organizations.

	Service Sector	Call Center	*F*	η
At my work, I feel bursting with energy	4.76	4.05	67.9***	0.265
When I get up in the morning, I feel like going to work	4.86	4.01	70.9***	0.270
I am enthusiastic about my job	5.21	4.25	110.7***	0.331
My job inspires me	4.97	4.01	106.0***	0.325
I am proud of the work that I do	5.50	4.35	133.4***	0.360
I feel happy when I am working intensely	5.17	4.21	100.6***	0.318
Work engagement index	5.07	4.15	123.8***	0.348

Note: Response categories range from 1 = never to 7 = always.
Significance at *$p<0.05$; **$p<0.01$; ***$p<0.001$.

Job resources

Autonomy

Due to its interactive nature, service sector work in general is characterized by rather low levels of employee control over working time, place, or content. However, compared with other service sector workers, call center employees report even fewer opportunities to influence their jobs, which is a finding that provides support for earlier claims about the restricted task discretion and low task variety afforded to the employees in

call centers (Grebner et al., 2003; Taylor et al., 2003; Zapf et al., 2003). The most notable differences are found between the comparison groups when the autonomy index is disaggregated. Especially, call center employees felt that they could less often influence what their jobs involve and how their job is done in comparison to employees in other service jobs. When examining the skill aspects of the autonomy index, it is noticeable that call center work does not deviate much from other industry branches in the service sector. Call center employees do report fewer opportunities to use their creativity, but it is notable that there are no statistically significant differences between the perceptions of call center and other service sector employees with respect to the repetitiveness of their jobs. Both groups of employees report that their jobs involve highly repetitive tasks. Moreover, call center employees report having similar opportunities to learn new things as other service sector workers.

Table 2 Job autonomy and skill variety in call centers and other service sector organizations.

	Service Sector	Call Center	*F*	η
Do you get to learn new things in your job?	2.83	2.78	1.2	0.037
Does your job require creativity?	2.61	2.37	26.3***	0.169
Does your job involve repetitive tasks?	3.18	3.20	0.2	0.014
Are you free to decide how your job is to be done?	2.69	2.18	101.5***	0.319
Are you free to decide what your job involves?	1.90	1.43	108.4***	0.328
Does your job require you to invent your own tasks?	1.69	1.30	75.0***	0.277
Are you free to decide when you do your work?	1.60	1.60	0.0	0.003
Are you free to decide to work wherever is best for you, either at home or at work?	1.09	1.26	26.0***	0.168
Autonomy index	2.03	1.84	47.7***	0.224

Note: Response categories range from 1 = never to 4 = always.
Significance at *$p<0.05$; **$p<0.01$; ***$p<0.001$.

Social support The combined index of social support at the workplace does not reveal any differences between the call center environment and other types of service sector work communities. When we examine the individual variables, the variations between the two groups are found to be rather small. Nearly everyone feels that they are getting along well with their colleagues. In addition, fluent cooperation with supervisors seems to be on a very high level, although somewhat fewer call center employees agree with the statement "I get on well with my supervisors" than other service sector employees.

With regard to having a good spirit of unity, there are no statistically significant differences but call center employees perceive that they get more support from their colleagues than employees in other service sectors.

Table 3 Social support in call centers and other service sector organizations.

	Service Sector	Call Center	*F*	η
There is a good spirit of unity	3.86	3.78	1.6	0.042
My colleagues are there for me	3.06	3.41	27.5***	0.173
People understand that I can have a bad day	3.68	3.63	0.9	0.031
I get on well with my superiors	4.24	4.12	5.9*	0.081
I get on well with my colleagues	4.37	4.40	0.5	0.023
Social support index	3.84	3.87	0.7	0.028

Note: Response categories range from 1 = strongly disagree to 5 = strongly agree.
Significance at *p<0.05; **p<0.01; ***p<0.001.

Job demands Job demands were assessed through five questions related to the different sources of pressure experienced at work. Overall, call center employees seem to report a higher level of pressure when comparing the sum index mean to other service sector workers. The difference does not seem very large but it is statistically significant. By further examining the individual statements about demands, more detailed information is acquired. The tempo of work in call centers appears to be very high as call center workers reported more often being required to work fast compared with other service sector employees. This is also reflected in the statements of whether the demands exceed individual performance limits. Call center workers felt more often that their job required too much input from them compared with other service sector employees. However, there is only a small difference between call center and service sector employees in terms of being required to work very hard. These results are in line with earlier studies that highlight the high demands and stressful aspects of call center jobs (Grebner et al., 2003).

Table 4 Job demands in call centers and other service sector organizations.

	Service Sector	Call Center	*F*	η
Does your job require you to work fast?	2.97	3.25	46.3***	0.221
Does your job require you to work very hard	3.08	3.18	5.4*	0.077
Do you feel that your job requires too much input from you?	2.21	2.37	11.5**	0.113
Do you have enough time to complete your job?	2.45	2.36	3.6	0.063
Does your job often make conflicting demands on you?	2.25	2.43	18.2***	0.141
Demand index	2.61	2.77	26.1***	0.168

Note: Response categories range from 1 = never to 4 = always.
Significance at *p<0.05; **p<0.01; ***p<0.001.

Results from the regression analysis

Hierarchical regression analyses for work engagement are presented in Table 5. The analyses were implemented separately for other service sector employees and for call center employees. The regression model consists of three steps. First, the respondents' personal characteristics, gender, age, marital status, and possible children living at home

Table 5 Hierarchical Regression Analysis for Work Engagement.

	Service sector employees	Call center employees	Total sample
Step 1			
Gender (0 = man, 1 = woman)	–0.04	0.05	0.07*
Age	0.19***	0.18**	0.27***
Married (0 = no, 1 = yes)	–0.03	0.02	–0.02
Children at home (0 = no, 1 = yes)	0.04	0.08	0.07*
ΔR^2	0.043**	0.061***	0.101***
Step 2			
Supervisory position (0 = no, 1 = yes)	0.13*	0.29***	0.21***
Tertiary education (0 = no, 1 = yes)	0.03	0.01	0.02
Temporary contract (0=no, 1=yes)	0.13*	0.11*	0.10**
ΔR^2	0.029**	0.081***	0.045***
Step 3			
Demands	–0.13**	–0.26***	–0.23***
Autonomy	0.36***	0.39***	0.40***
Support	0.22***	0.11**	0.15***
ΔR^2	0.188***	0.268***	0.250***
Step 4			
Call center (0 = no, 1 = yes)			–0.15***
ΔR^2			0.018***
Step 5			
Demands × call center (interaction)			–0.10*
Autonomy × call center (interaction)			0.13**
Support × call center (interaction)			–0.04
ΔR^2			0.011**
R^2	0.259	0.411	0.431
N	447	431	878

Note: Significance at *p<0.05; **p<0.01; ***p<0.001.
Standardized regression coefficients.

were added to the model. In the second phase, we added respondent's educational level and factors that describe position in the organization: whether they work in a supervisory position and whether they have temporary employment contract. In the third step, we added main predictors, demands, autonomy, and social support to the model. The interaction between job demands and resource factors was also tested but proved to be statistically insignificant, and thus was excluded from the final model. It follows from this that we will mainly concentrate on the exploration of the main effects. In addition for group-level analyses, the table presents a model for the whole sample. This model includes five steps. The first three steps are identical to the one mentioned above, the fourth step includes call center dummy, and the fifth adds interaction terms for call center dummy with demands, autonomy, and social support. A statistically significant interaction means that the effect sizes differ between the call center and service sector. The interaction effects are depicted in Figures 1 and 2.

The background factors included in the model in the first and second step explain the variation in work engagement only modestly. (explanation power R^2, which is less than 7% in both samples). Women perceived themselves to be more engaged in their work than men, but this connection was statistically significant only in the whole sample. The observed gender difference is in line with earlier studies (Mauno et al., 2007). Marital status or having children living at home had no significant effect on work engagement in subsamples. However, having children increased work engagement significantly in the whole sample. Mauno et al. (2007) have found similar effects. In addition, age was found to affect work engagement as older employees are more likely to be engaged in their work than their younger colleagues. Mauno et al. (2007) did not find age to have any association with work engagement. Thus, in our study, work engagement

Figure 1: Interaction effects of call center and autonomy on work engagement.

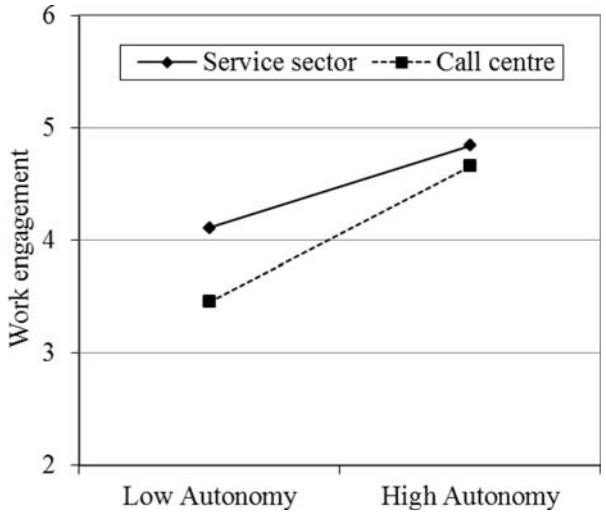
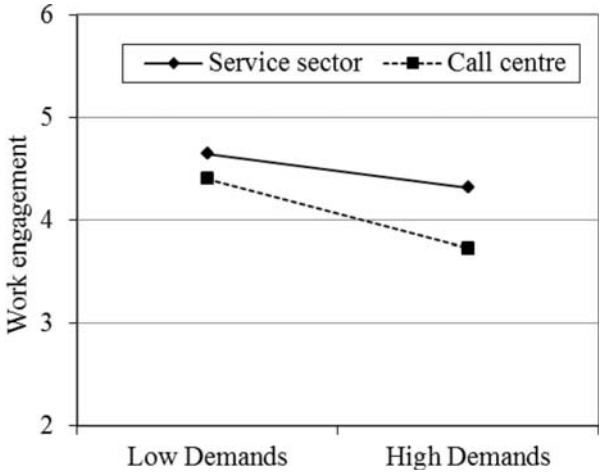


Figure 2: Interaction effects of call center and demands on work engagement.



relates mainly to work condition factors. Yet, rather unexpectedly, educational level had no effect on perceived work engagement. A supervisory position had a significant effect on work engagement in both subsamples, but effect seems to be stronger in call centers. Bakker et al. (2003) have also found supervisors in call centers to be more dedicated and committed than customer service workers. Overall, the results gained by adding in background factors contradict previous findings and explain very little of the variation in engagement, which again indicates that we should concentrate more on job characteristics.

The underlying theoretical model for our study was adapted from Karasek and Theorell (Karasek, 1979; Karasek and Theorell, 1990). The adjusted *R*-scores indicate that the model fits the call center in a different way to the way it fits other service sector organizations. The multivariate model explained 41% of the total variation of the work engagement variable in call centers. The model fit was clearly poorer (26%) for our comparison group.

We found some statistically significant differences in the ways in which demands and autonomy affect work engagement in the different work environments of these two comparison groups. In our data, job autonomy was found to be the best predictor of work engagement in both samples. The positive effect of autonomy was even stronger in call centers where the level of discretion was low compared with other service sector organizations (Figure 1). In this respect, our results are in line with previous studies which stress that job resources are found to predict work engagement better than job demands (e.g., Mauno et al., 2007). Also, social support from supervisors and colleagues is expected to enhance work engagement and can be considered another set of job resources (e.g., Halbesleben, 2010). As anticipated, social support was positively associated with work engagement in both groups, but there was no difference in this effect between groups. Whereas earlier studies found mainly weak connections between job

demands and engagement (e.g., Hakanen et al., 2008), the negative effect of demands on engagement was notable, especially among call center employees (Figure 2). It is also evident from both figures that employees in call center have lower level of work engagement than employees in other service sectors even after controlling for background factors, job demands, autonomy, and social support.

Discussion

Although it has been acknowledged that service work in general is of lower quality and that this sector of employment has been affected by service sector Taylorism, call center work still appears to be an exceptional case. In the samples studied, call center employees reported higher demands and lower autonomy and social support than employees in other service sector organizations. The findings of this study give support to studies indicating that call centers are characterized by elements of Taylorism, such as limited complexity as well as lower control over the pace of work and work methods (e.g., Taylor et al., 2003). Moreover, our results contradict Holman (2002) who has argued that levels of well-being are similar in call center and comparable clerical and factory jobs. In our comparative data, call center employees did not appear to have stronger social relationships. The result could be seen as unanticipated in the light of earlier studies that highlight the importance of social support, teams, and team building in call centers. Social relationships and the social support they provide have been referred to as coping mechanism against a culture of surveillance (e.g., Deery et al., 2010). We found that social support had a similar boosting effect to work engagement among call center workers and other service sector employees.

According to our results, inducing positive work-related well-being in a regimented call center environment is challenging. In general, call center employees experienced less feelings of engagement than employees in the comparison organizations. According to the regression analysis, autonomy was a significant precursor of the engagement experiences in both groups studied. Moreover, when compared with earlier studies and to the comparison group, work demands resulted in an exceptionally strong negative association with engagement in call centers. In other words, intense work pressure seems to reduce the experience of positive well-being especially in the call centers.

These findings could have practical implications for the organization of work in similarly demanding work environments. Our results suggest that in order to improve work engagement, job demands (particularly time-related pressures) should be reduced and task discretion increased by decreasing managerial control and standardization, in order to induce processes which lead to work engagement. Given that the management of interactive service work relies on the need to elicit tacit skills which deliver quality output as well as specified quantities of output, it is not surprising that coercive and direct control may be counterproductive (van den Broek, 2004). Our results also lead us to question whether social support would be a meaningful resource in a highly demanding work environment as some literature suggests. Our research suggests that organizations should reflect on whether concentrating organizational efforts on the development of social relationships by team building and "having fun" is an effective way to buffer the negative effects of an environment that is highly controlled and competitive, which is something other managerial studies propose (see, e.g., Kinnie et al., 2000).

Work engagement is a concept that consists of rather intrinsic types of satisfaction and commitment. It could be the case that those employees whose well-being is not hampered by a call center working environment are those who have more extrinsic orientations and attitudes toward work and use these as sources of well-being. The concept of work engagement might not capture the motivation and well-being which relates to pay incentives, the reaching of performance targets, and, for instance, secure employment. Therefore, the issue of well-being at work, especially in a call center environment, should be studied with wider and more multifaceted concepts.

Appendix Bivariate correlations between independent and dependent variables.

	A	B	C	D	E	F	G	H	I	K	L
A. Work engagement	1										
B. Call center	–0.34*	1									
C. Female	0.13*	–0.21*	1								
D. Age	0.30*	–0.35*	0.19*	1							
E. Married	0.08*	–0.11*	0.04	0.16*	1						
F. Children	0.14*	–0.12*	0.11*	0.22*	0.20*	1					
G. Supervisor	0.23*	–0.06*	–0.12*	0.17*	0.16*	0.10*	1				
H. Tertiary education	–0.04	0.08*	–0.08*	–0.29*	0.03	–0.10*	0.11*	1			
I. Temporary contract	–0.09*	0.18*	–0.16*	–0.43*	–0.13*	–0.18*	–0.20*	0.15*	1		
J. Demands	–0.27*	0.17*	0.08*	0.11*	0.01	0.01	0.08*	–0.05	–0.09*	1	
K. Autonomy	0.51*	–0.22*	–0.02	0.27*	0.15*	0.15*	0.42*	0.05	–0.23*	–0.10*	1
L. Support	0.20*	0.03	–0.13*	–0.14*	0.01	–0.08*	0.06*	0.05	0.07*	–0.20*	0.12*

*Statistically significant at 0.05 level (two-tailed test).
N = 878.

References

Bakker, A. and Demerouti, E. (2007) 'The job demands-resources model: The state of art'. *Journal of Managerial Psychology* 22(3): 309–328.

Bakker, A., Demerouti, E., and Schaufeli, W. (2003) 'Dual processes at work in a call centre: An application of the job demands—resources model'. *European Journal of Work and Organizational Psychology* 12(4): 393–417.

Bakker, A., Van Emmerik, I.J., and Euwema, M. (2006) 'Crossover of burnout and engagement in work teams'. *Work & Occupations* 33: 464–489.

Bakker, A., Hakanen, J., Demerouti, E., and Xanthopoulou, D. (2007a) 'Job resources boost work engagement, particularly when job demands are high'. *Journal of Educational Psychology* 99: 274–284.

Bakker, A., Schaufeli, W., Demerouti, E., and Euwema, M.C. (2007b) An organisational and social psychological perspective on burnout and work engagement. In W. Stroebe and M. Hewston (eds.) *The scope of social psychology: Theory and applications: Essays in honour of Wolfgang Stroebe*. Hove: Psychology Press, 227–251.

Bakker, A., Schaufeli, W., Leiter, M., and Taris, T. (2008) 'Work engagement: An emerging concept in occupational health psychology'. *Work & Stress* 22(3): 187–200.

Batt, R., and Moynihan, L. (2002) 'The viability of alternative call centre production models'. *Human Resource Management Journal* 1(4): 14–34.

Belt, V., Richardson, R., and Webster, J. (2002) 'Women, social skill and interactive service work in telephone call centres'. *New Technology, Work and Employment* 17(1): 20–34.

Callaghan, G., & Thompson, P. (2001) 'Edwards revisited: Technical control and call centres'. *Economic and Industrial Democracy* 22(1): 13–37.

Charbotel, B., Croidieu, S., Vohito, M., Guerin, A.-C., Renaud, L., Jaussaud, J., Bourboul, C., Imbard, I., Ardiet, D., and Bergeret, A. (2009) 'Working conditions in call-centers, the impact on employee health: A transversal study. Part II'. *International Archives of Occupational and Environmental Health* 2: 747–756.

Croidieu, S., Charbotel, B., Vohito, M., Renaud, L., Jaussaud, J., Bourboul, C., Ardiet, D., Imbard, I., Guerin, A.-C., and Bergeret, A. (2008) 'Call-handlers' working conditions and their subjective experience of work: A transversal study'. *International Archives of Occupational and Environmental Health* 82: 67–77.

Deery, S., Iverson, R., and Walsh, J. (2010) 'Coping strategies in call centres: Work intensity and the role of co-workers and supervisors'. *British Journal of Industrial Relations* 48(1): 181–200.

Demerouti, E., Bakker, A., De Jonge, J., Janssen, P., and Schaufeli, W. (2001a) 'Burnout and engagement at work as a function of demands and control'. *Scandinavian Journal of Work Environment Health* 27(4): 279–286.

Demerouti, E., Bakker, A., Nachreiner, F., and Schaufeli, W. (2001b) 'The job demands-resources model of burnout', *Journal of Applied Psychology* 86(3): 499–512.

Grebner, S., Semmer, N., de Faso, L., Gut, S., Kälin, W., and Elfering, A. (2003) 'Working conditions, well-being and job related attitudes among call center agents', *European Journal of Work and Organizational Psychology* 12(4): 341–365.

Hakanen, J., Bakker, A., and Demerouti, E. (2005) 'How dentists cope with their job demands and stay engaged: The moderating role of job resources'. *European Journal of Oral Sciences* 113: 479–487.

Hakanen, J., Bakker, A., and Schaufeli, W. (2006) 'Burnout and work engagement among teachers'. *Journal of School Psychology* 43(6): 495–513.

Hakanen, J., and Roodt, G. (2010) Using job demands and resources model to predict the engagement: Analysing a conceptual model. In A. Bakker & M. Leiter (eds.) *Work engagement. A handbook of essential theory and research* (pp. 85–101). New York: Psychology Press.

Hakanen, J., Schaufeli, W., and Ahola, K. (2008) 'The job demands-resources model: A three-year cross-lagged study of burnout, depression, commitment, and work engagement'. *Work & Stress* 22(3): 224–241.

Halbesleben, J. (2010) A meta-analysis of work engagement: Relationships with burnout, demands, resources, and consequences. In A. Bakker and M. Leiter (eds.) *Work engagement. A handbook of essential theory and research* (pp. 102–117). New York: Psychology Press.

Hallman, D., Frenkel, S., Sorensen, O., and Wood, S. (2008) 'Work design variation and outcomes in call centers: Strategic choice and institutional explanations'. *Industrial & Labor Relations Review* 62: 510–510.

Holman, D. (2002) 'Employee well-being in call centres'. *Human Resource Management Journal* 12(4): 35–50.

Holman, D. (2003) 'Phoning in sick? An overview of employees stress in call centres'. *Leadership & Organization Development Journal* 24(3): 123–130.

Holman, D., Chissick, C., and Totterdell, P. (2002) 'The effects of performance monitoring on emotional labor and well-being in call centers'. *Motivation and Emotion* 26(1): 57–81.
Johnson, J., and Hall, E. (1988) 'Job strain, work place social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population'. *American Journal of Public Health* 78(10): 1336–1342.
Karasek, R. (1979) 'Job demands, job decision latitude, and mental strain: Implications for fob redesign'. *Administrative Science Quarterly* 24(2): 285–308.
Karasek, R., and Theorell, T. (1990) *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books.
Kinnie, N., Hutchinson, S., and Purcell, J. (2000) '"Fun and surveillance": The paradox of high commitment management in call centres'. *International Journal of Human Resource Management* 11(5): 967–985.
Knights, D., and McCabe, D. (1998) 'What happens when the phone goes wild? Staff, stress and spaces for escape in a BPR regime'. *Journal of Management Studies* 35(2): 163–194.
Maslach, C., Schaufeli, W., and Leiter, M. (2001) 'Job burnout'. *Annual Review of Psychology* 52(1): 397–422.
Mauno, S., Kinnunen, U., and Ruokolainen, M. (2007), 'Job demands and resources as antecedents of work engagement'. *Journal of Vocational Behaviour* 70: 149–171.
Mulholland, K. (2004) 'Workplace resistance in an Irish call centre: Slammin', scammin', smokin' an' leavin". *Work, Employment and Society* 18(4): 709–772.
Parzefall, M.-R., and Hakanen, J. (2010) 'Psychological contract and its motivational and health-enhancing properties'. *Journal of Managerial Psychology* 25(1): 4–21.
Rose, E., and Wright, G. (2005) 'Satisfaction and dimensions of control among call center representatives'. *International Journal of Human Resource Management* 16(1): 136–160.
Russell, B. (2007) 'You gotta lie to it: Software applications and the management of technological change in a call center'. *New Technology, Work and Employment* 22(2): 132–145.
Salanova, M., Agut, S., and Peiró, J.M. (2005) 'Linking organizational facilitators and work engagement to employee performance and customer loyalty: The mediation of service climate'. *Journal of Applied Psychology* 90: 1217–1227.
Salanova, M., and Schaufeli, W. (2008) 'A cross-national study of work engagement as a mediator between job resources and proactive behavior'. *International Journal of Human Resource Management* 19(1): 116–131.
Schalk, R., and Van Rijckevorsel, A. (2007) 'Factors influencing absenteeism and intention to leave in a call centre'. *New Technology, Work and Employment* 22(3): 260–274.
Schaufeli, W., and Bakker, A. (2004) 'Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study'. *Journal of Organizational Behavior* 25: 293–315.
Schaufeli, W., Bakker, A., and Van Rhenen, W. (2009) 'How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism'. *Journal of Organizational Behavior* 30: 893–917.
Schaufeli, W., Salanova, M., González-Romá, V., and Bakker, A. (2002) 'The measurement of engagement and burnout: A two sample confirmatory factor analytic approach'. *Journal of Happiness Studies* 3(1): 71–92.
Schaufeli, W., Taris, T., and Bakker, A. (2006) Dr. Jekyll and Mr. Hide: On the differences between work engagement and workaholism. In R. Burke (ed.) *Research companion to working time and work addiction.* Cheltenham: Edward Elgar, 193–217.
Søderfeldt, B., Søderfeldt, M., Jones, K., Ocampo, P., Mountaner, C., Ohlson, C.G., and Warg, L.E. (1997) 'Does organization matter? A multilevel analysis of the demand–control model applied to human services'. *Social Science and Medicine* 44, 527–534.

Taylor, P., and Bain, P. (1999) 'An assembly line in the head. Work and employee relations in the call centre'. *Industrial Relations Journal* 30(2): 101–117.
Taylor, P., Baldry, C., Bain, P., and Ellis, V. (2003) 'A unique working environment: Health, sickness and absence management in UK call centres'. *Work, Employment and Society* 17(3): 435–458.
Taylor, P., Hyman, J., Mulvey, G., and Bain, P. (2002) 'Work organisation and the experience of work in call centres'. *Work, Employment and Society* 16(1): 101–117.
Townsend, K. (2005) 'Electronic surveillance and cohesive teams: Room for resistance in an Australian call centre'? *New Technology, Work and Employment* 20(1): 47–59.
Ulrich, D. (1997) *Human resource champions*. Boston, MA: Harvard Business School.
van den Broek, D. (2004) '"We have the values": Customers, control and corporate ideology in call centre operations'. *New Technology, Work and Employment* 19(1): 2–13.
Van der Doef, M., and Maes, S. (1999) 'The job demand-control (-support) model and psychological well-being: A review of 20 years of empirical research'. *Work & Stress* 13(2): 87–114.
Wegge, J., Van Dick, R., Fisher, G., Wecking, C., and Moltzen, K. (2006) 'Work motivation, organisational identification, and well-being in call centre work'. *Work & Stress* 20(2): 60–83.
Xanthopoulou, D., Bakker, A., Heuven, E., Demerouti, E., and Schaufeli, W.B. (2008) 'Working in the sky: A diary study on work engagement among flight attendants'. *Journal of Occupational Health Psychology* 13: 345–356.
Xanthopoulou, D., Bakker, A., Heuven, E., Demerouti, E., and Schaufeli, W.B. (2009) 'Work engagement and financial returns: A diary study on the role of job and personal resources'. *Journal of Occupational and Organizational Psychology* 82: 183–200.
Zapf, D., Isic, A., Bechtoldt, M., & Blau, P. (2003) 'What is typical for call centre jobs? Job characteristics, and service interactions in different call centres'. *European Journal of Work and Organizational Psychology* 12(4): 311–340.

End notes

[1] We also conducted factor analyses in order to test the unidimensionality of all scales. According to scree test of eigen values, one factor solution was best for all scales. The extracted factor explained 80% of the variance in the variables measuring work engagement. Corresponding figures were 38%, 45%, and 51% for autonomy, social support, and job demands, respectively.