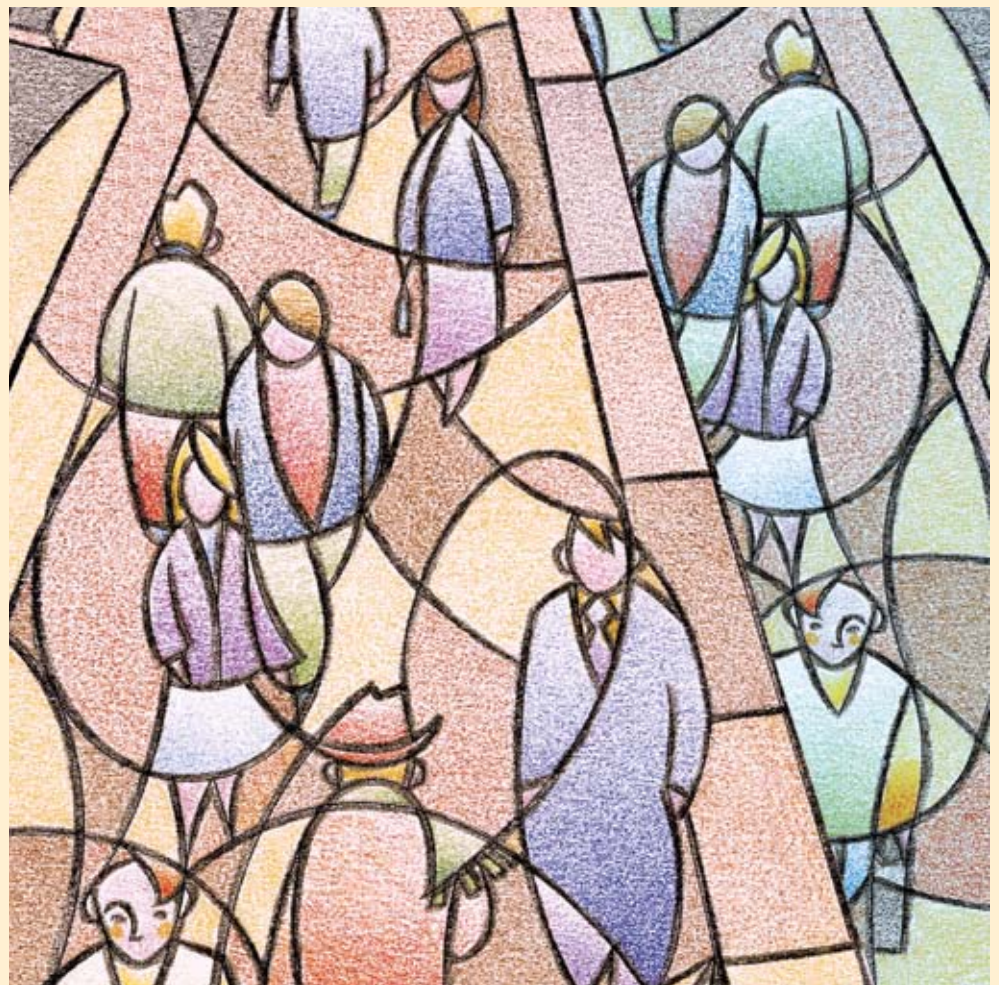




First European Quality of Life Survey: Quality of work and life satisfaction



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Having a job is a crucial factor in determining individual life satisfaction. This report explores the extent to which a good quality job can influence overall quality of life. The findings are based on the Foundation's First European Quality of Life Survey which was carried out across 28 countries: the EU27 and Turkey. The report analyses the relationship between working conditions, job satisfaction and work-life balance. It finds significant differences between countries and regions in terms of life satisfaction, based on different levels of unemployment and economic prosperity. Its conclusions point to the fact that job satisfaction can be increased by improving working conditions, making work more interesting, facilitating career progression, and reducing stress and dangerous working conditions.

The European Foundation for the Improvement of Living and Working Conditions is a tripartite EU body, whose role is to provide key actors in social policymaking with findings, knowledge and advice drawn from comparative research. The Foundation was established in 1975 by Council Regulation EEC No. 1365/75 of 26 May 1975.



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Foreword

The European Foundation for the Improvement of Living and Working Conditions has been committed to obtaining more in-depth information about how people live and how they perceive their circumstances. In 2003, the Foundation conducted fieldwork for its First European Quality of Life Survey in 28 countries: the EU25, the two acceding countries – Bulgaria and Romania – and one candidate country, Turkey. The survey was a questionnaire-based, representative household survey, which aimed to analyse how various life factors affect Europeans' quality of life. In particular, it addressed a number of key areas: employment, economic resources, housing and local environment, family and household structure, participation in the community, health and healthcare, knowledge/education and training.

The results of the Foundation's First European Quality of Life Survey were published in 2004. Since then, the Foundation has been engaged in more extensive analysis of how different aspects impact on individual quality of life in the EU. This activity has produced a series of in-depth analytical reports, which look at key components of quality of life across all 28 countries, identifying differences and similarities as well as policy implications.

This analytical report addresses the important question concerning the extent to which quality of work influences people's overall quality of life. More specifically, the report undertakes a detailed analysis of how working conditions, job satisfaction and work–life balance affect life satisfaction. Central to this analysis is describing how the characteristics of the work situation affect people's subjective life satisfaction. In doing so, the report reaches some significant conclusions, in particular the strong correlation between working conditions and job satisfaction, which in turn is shown to affect people's overall life satisfaction.

At the same time, the report underlines an emerging east–west divide in terms of people's experiences of working conditions, with more negative experiences prevailing in the eastern, and also in some of the southern, European countries. Given the significant impact of poor working conditions on job satisfaction, and thus on life satisfaction, the widening gap in levels of working conditions constitutes an extremely important consideration for policymakers in the EU. Moreover, the regional variations in terms of particular priorities – for example, the greater importance of more intrinsic, subjective aspects of quality of work in the western European countries, in contrast to the higher significance of more extrinsic aspects such as pay and job security in the eastern countries – highlights the need for policies tailored to the specific concerns of a region or country and which embrace the cultural, historical, economic and social differences of countries across Europe.

We hope that the findings of this report will contribute to shaping EU policies aimed at solving such issues and at enhancing the quality of work – and in turn the quality of life – of people across Europe.

Jorma Karppinen
Director

Willy Buschak
Deputy Director

Country codes (Situation in 2004)

EU25

AT	Austria
BE	Belgium
CZ	Czech Republic
CY	Cyprus
DK	Denmark
EE	Estonia
FI	Finland
FR	France
DE	Germany
EL	Greece
HU	Hungary
IE	Ireland
IT	Italy
LV	Latvia
LT	Lithuania
LU	Luxembourg
MT	Malta
NL	Netherlands
PL	Poland
PT	Portugal
SK	Slovakia
SI	Slovenia
ES	Spain
SE	Sweden
UK	United Kingdom

Acceding countries

BG	Bulgaria
RO	Romania

Candidate country

TR	Turkey
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Abbreviations

EQLS	European Quality of Life Survey
GDP	Gross Domestic Product
EU15	15 EU Member States (pre May 2004)
NMS	10 new Member States that joined the EU in May 2004
EU25	25 EU Member States (post May 2004)

Abbreviations of country clusters used in this report

Western Europe	Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Malta, Netherlands, Slovenia, Spain, Sweden, United Kingdom
Eastern Europe	Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovakia.
EU12 High	Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Sweden, United Kingdom
EU7 Intermediate	Cyprus, Czech Republic, Greece, Malta, Portugal, Slovenia, Spain
EU6 Low	Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia
ACC3	Bulgaria, Romania, Turkey

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Introduction

Assessing quality of life across Europe enables a comprehensive comparison to be made of countries that goes beyond narrow material considerations such as gross domestic product (GDP). Instead broader factors such as satisfaction with different aspects of life, as well as happiness in general are taken into account, (Noll, 2000; Noll and Zapf, 1994). Over the considerable length of time that quality of life has been studied, a wide variety of subjective and objective measures have been developed, covering a range of domains such as living standards, housing, health, family and social relationships, as well as work (Phillips, 2006; Rapley, 2003).

In 2003, the European Foundation for the Improvement of Living and Working Conditions developed its own comprehensive model for measuring quality of life when it launched the European Quality of Life Survey (EQLS) in 28 countries – namely, the 25 EU Member States (EU25), the two acceding countries – Bulgaria and Romania – and one candidate country, Turkey. Specifically, the EQLS examined six key areas of quality of life: employment; economic resources; family and households; community life and social participation; health and healthcare; and knowledge, education and training. Since the Foundation published the final results of this survey in 2004, it has been engaged in more in-depth analysis of key components of quality of life.

Among the series of analytical reports based on these findings, this report considers the relationship between quality of work and quality of life through a detailed analysis of how working conditions, job satisfaction and work–life balance affect life satisfaction. Rather than trying to describe all aspects of quality of life, the report concentrates on subjective assessments of quality of life using a measure of life satisfaction – namely, the indicator ‘subjective well-being’.

It should be noted that significant gaps emerge in current attempts to explain what influences subjective assessments of quality of life or, in this instance, subjective life satisfaction. As Fahey, Nolan and Whelan (2003, p. 69) observed, while a number of aspects of life satisfaction have been explored in previous reports by the Foundation, a detailed analysis of the role of work in this context has been absent. In particular, Fahey et al (2003) highlight the need for an investigation into the role of ‘work–family interaction’ in relation to the life course.

This report aims to address this major omission by providing a detailed account of the relationship between subjective life satisfaction and the quality of work, including work–family interaction, within a cross-national context using advanced multivariate techniques. More specifically, it aims to address the question of whether the quality of a work situation and subjective life satisfaction are empirically and consistently related across 28 European countries. Furthermore, it examines what particular factors, if any, in terms of the quality of work contribute to this relationship. For example, as suggested by Fahey et al (2003), is a working environment that facilitates a more balanced work–family situation a crucial determining factor in this instance, or do other objective and subjective aspects of the work situation itself play a greater role in determining subjective life satisfaction? Finally, the report examines whether any major differences arise between European countries and regions in relation to this issue.

As the primary focus of the investigation is on the relationship between the quality of work and life satisfaction, the analysis is restricted predominantly to individuals who are currently employed and aged 18 years or older. The relationship between employment status and quality of life has already been explored by the Foundation in previous reports and will only be addressed briefly here. Instead, the primary purpose of this analysis is to assess the impact of differing work situations on subjective levels of life satisfaction among the employed adult population in Europe.

The analysis proceeds in five stages. Firstly, the relationship between working conditions and subjective life satisfaction is considered, by looking at how different work situations affect life satisfaction. The impact of work characteristics on job satisfaction is analysed next. Thirdly, the report looks at the indirect effects of such working conditions on life satisfaction, as mediated by job satisfaction. The issue of work–life balance is then considered, in an effort to determine how it impacts on satisfaction with work, on the one hand, and satisfaction with life, on the other. Finally, the report briefly looks at the impact of unemployment on life satisfaction.

Importance of work for life satisfaction

Previous empirical research on the relationship between quality of work and life satisfaction has been inconclusive. For example, while some studies have found that having a good job was considered an important predictor of life satisfaction in most EU countries (Delhey, 2004; Böhnke, 2005; Haller and Hadler, 2006), other studies suggest that no single aspect of the job is important in itself – rather, it is the presence or absence of a job that is crucial, since unemployment adversely affects life satisfaction (Frey and Stutzer, 2005; Haller and Hadler, 2006; Kapitány et al, 2005). In fact, some studies go so far as to suggest that the relationship between quality of work and subjective life satisfaction is, at best, extremely weak (Rode and Near, 2005).

In social indicators research, two main sets of theories are used to explain the relationship between quality of working life and life satisfaction: ‘spill over theories’ and Maslow’s ‘needs hierarchy theories’. Spill over theories predict that satisfaction in one life domain can ‘spill over’ into other life domains (Sirgy et al, 2001; Efraty and Sirgy, 1990; Wilensky, 1960). This can occur in a horizontal direction – for example, from satisfaction with work to satisfaction with health – or alternatively, in a vertical direction as domains up and down the domain hierarchy can spill over into each other. Hence, satisfaction with the work domain might affect satisfaction with life as the highest-level domain. The second set of theories, needs hierarchy theories (Hajiran, 2006; Porter, 1961), postulates that there are different levels of needs and that when one set of needs is satisfied, they are no longer important in determining life satisfaction (or job satisfaction); instead, a higher set of needs come into play once lower-level needs are satisfied. This means that survival needs (a decent salary and secure job) take precedence, but once these are satisfied, social needs, ego needs (self-esteem and autonomy) as well as self-actualisation become more important. The report will explore if these theories apply across Europe.

To date, a range of studies have found that job satisfaction influences life satisfaction. For example, earlier Foundation reports discovered that not only was having a good job (defined as being a necessity for a good life) important for 91% of people in the EU25, but that it was even more important (97%) in the 10 new Member States (NMS), along with the two acceding countries and one candidate country (ACC3), than in the older EU15 Member States (Delhey, 2004). In particular, the studies based on Eurobarometer data found that having a good job was considered a necessity for having a good life across the various countries. Indeed, material considerations, such as having a good job, were more important in some countries than others. Delhey (2004) ascribes these cross-national differences to the relative levels of modernisation and the weight of materialist as opposed to post-materialist factors (Inglehart, 1990) in the assessment of subjective well-being.¹

¹ Inglehart and his colleagues, while conducting the World Values Surveys, concluded that there was a ‘value shift’ away from materialist values of economic survival and security and towards post-materialist values of self-expression and a concern with quality of life in affluent societies, where economic survival was no longer the primary concern. Post-materialist values were also associated with greater tolerance of diversity and commitment to gender equality. In Inglehart’s study, the eastern European societies were ranked as being more ‘materialist’ than ‘post-materialist’.

Similarly, based on the EQLS data, Böhnke (2005) found that although satisfaction with standard of living had the most significant influence on life satisfaction throughout Europe, work also played an important role in explaining life satisfaction, particularly in the EU15. More specifically, Böhnke found that apart from standard of living, EU15 citizens' job and employment situation were important contributors to life satisfaction. However, in NMS countries, the impact of job satisfaction was much weaker. Böhnke accounts for these cross-national and regional differences by arguing that material resources are more important in the poorer countries, while work is a greater source of social identity in the EU15 (2005, p. 28).

Kapitány et al (2005) suggest that, at the very most, an extremely weak relationship exists between quality of work and life satisfaction. In fact, according to their report *Working and living in an enlarged Europe*, the only significant relationship between work and subjective life satisfaction concerns the presence or absence of a job. As expected, people who were employed were notably more likely to report higher levels of life satisfaction than those who were not. Conversely, those who had experienced long-term unemployment had much lower levels of life satisfaction (Kapitány, 2005). In contrast, the specific aspects of quality of work investigated were found to be either loosely correlated or uncorrelated with life satisfaction.

Nevertheless, it is important to note that job satisfaction is in itself a complex thing, usually measured by satisfaction with a range of aspects of the job – such as satisfaction with rewards or satisfaction with working hours (Rose, 2003). While it is often assumed that having a good job leads to job satisfaction, this is not necessarily the case. For example, many studies have uncovered a 'satisfaction paradox' – that is, whereby women and certain kinds of well-rewarded less skilled workers (termed 'affluent workers'), who are generally engaged in lower quality jobs, are nevertheless satisfied with their work (Goldthorpe et al, 1968; Hakim, 2000). This is explained by the high rewards in the case of lower-skilled workers and the greater concern with family life in the case of women. In these studies, both women and low-skilled workers were satisfied with their jobs because they had concerns other than those merely related to the content of the work itself. In other words, various external factors compensated for the lack of job quality. Nonetheless, more recent studies of job satisfaction suggest that a gender convergence may now be found in the evaluation of work (Rose, 2005).

Since the Eurobarometer data were released on which Kapitány et al (2005) published their report, new and more sophisticated surveys have been conducted, incorporating a range of quality of work measures, including perceptions of the work–family balance. The EQLS, in particular, allows for a more detailed look at quality of work and subjective life satisfaction and at the relationship between these two factors.²

Such insights must be considered particularly fitting in light of the European Social Policy Agenda and the European Employment Strategy (EES), following on from the Lisbon agenda, which consider the creation of quality jobs as a key policy goal (European Commission, 2003). Indeed, as part of the response to the EES, a series of indicators have now been developed, which include satisfaction with work as one of the key elements (Adnett and Hardy, 2005). Moreover, quality of work has been further elaborated as a policy goal in revitalising the Lisbon Strategy in 2005 (European Commission,

² Although the EQLS contains far more information about work experiences, it includes less information about unemployment experiences than the earlier Eurobarometer survey used by Kapitány and colleagues.

2005b). This goal also constitutes one of the objectives of the European Employment Task Force, set up in 2003, which has devised a set of 10 indicators measuring quality in work as a way of improving labour market participation and economic growth (European Commission, 2003). While the majority of these 10 indicators require analysis at a more aggregate level – such as in relation to the gender gap in pay, or levels of youth unemployment – other factors such as improving flexibility in work practices as well as job security are, in fact, directly relevant to this report. In line with these policy initiatives, as well as with popular perceptions, it is assumed that subjective life satisfaction is dependent on having a good quality working life. This hypothesis will be further explored in this report.

Influence of work–family balance

It has been argued that it is not so much the factors that are directly work-related which are important in explaining life satisfaction or job satisfaction, but rather the work environment itself. This raises the crucial, albeit neglected, question regarding the role of work–life balance in determining quality of life (Diener and Suh, 1997; Fahey et al, 2003) – in other words, how work combines with other aspects of life, particularly family life. Achieving an appropriate work–family balance is considered important, not only for improving Europeans’ quality of life in general, but also for making family life sustainable in the midst of other pressures that people encounter. In fact, much evidence suggests that while some people are able to combine work and family life in a satisfactory manner, others report high levels of stress in their attempt to reconcile these two, often competing, spheres (Strandh and Nordenmark, 2003). Furthermore, it is not unreasonable to expect that the ability to successfully combine work and family responsibilities might well vary between men and women, given their traditionally differing family responsibilities, as the pressure of childcare or other caring responsibilities come to bear on both households and individuals at different points over the family life course.

The ability to successfully combine work and family responsibilities is particularly important in light of the Lisbon agenda, which aims to raise the participation rate of women in the labour market in all countries. Thus, work–life balance may no longer be considered as an exclusively private problem, but one of public policy. Indeed, improving work–life balance, redefined as the participation of men and women in family life, has become a European policy goal.³ This issue is addressed in this report by including work–family balance as a component of the quality of work measure.

It is assumed that life satisfaction will be positively influenced by the extent to which people can successfully combine work with family life and other obligations. More specifically, it is reasonable to expect that the majority of people would prefer a balanced life and that Europeans who report a favourable work–family balance are most likely to also report higher levels of quality of work and life satisfaction. It is also likely that people with a harmonious work–life balance, in which their competing needs and responsibilities are met, will generally attribute a higher importance to the influence of work on subjective life satisfaction than those who report an unfavourable work–life balance. Similarly, respondents who have a poor work–life balance will be more likely to report lower levels of subjective life satisfaction.

³ Resolution of the Council and of the Ministers for Employment and Social Policy meeting within the Council of 29 June 2000, on the balanced participation of men and women in family and working life (Official Journal C 218 of 31 July 2000).

The impact of quality of work on life satisfaction is also likely to vary, depending on an individual's needs and on their particular response to the work–life situation. For example, in some circumstances, the impact of work on life satisfaction may be quite low among individuals who have a poor work–life balance in terms of their family responsibilities, as people downplay the importance of work. The latter argument regarding the similarity in impact between those with a poor versus harmonious work–life balance will be tested in this analysis. Nonetheless, it is important to note that a finding of equivalence regarding the importance of the impact of quality of work on life satisfaction under differing work–life situations does not necessarily mean that the exact same processes apply for those with a poor work–life balance as for those with a better work–life balance. For example, access to childcare could make a difference, as could the availability of part-time work or the division of labour within a household. However, these considerations are beyond the scope of this report.

Significance of regional differences

This report considers regional rather than country differences. In addition to the EU aggregate level, several regional breakdowns are distinguished in the analysis, for example on the basis of countries' differences in terms of their overall wealth. This approach was taken for two reasons. Firstly, regions across Europe differ not only according to working conditions but also in terms of their levels of support for working parents and also with regard to people's subjective assessments of work–life balance. Working life, for example, appears to be more difficult in the NMS, where longer hours and lower rewards are more prevalent (Paoli and Parent-Thirion, 2003). Thus, it is reasonable to expect that satisfaction with quality of work – and therefore life satisfaction – are lower in these countries. Labour market regulations also vary across the different countries, governing the rights of part-time workers, working hours and the rights to social security. Although legislation has been implemented at European level to ensure a minimum standard of rights for all workers in the EU, substantial differences still exist across Europe. The role of gender also differs across regions. While much of the EU15 reflects a 'male breadwinner model' of employment (Lewis, 1992; Daly and Rake, 2003; Pfau-Effinger, 2003), the NMS and ACC3 have been more traditionally characterised by the full engagement of women in the labour market (Haas et al, 2006). This could have important implications not only for the way in which women and men view work and life satisfaction, but also in terms of their subjective assessments of work–life balance. Although it is assumed that quality of work affects subjective life satisfaction, notable regional variations may exist in this respect across Europe.

The issue of regional variations has important policy implications, since it points to ways in which quality of life can be improved for all Europeans. It raises questions, for example, of whether the emphasis should simply be on providing jobs in the less prosperous nations or whether it should be on finding ways to improve quality of work for all people. Moreover, are all aspects of working conditions important for subjective life satisfaction across regions, or is it necessary to tackle just some of these aspects? For example, it is possible that in some countries or regions, working conditions are poor, but that people do not necessarily see them as being problematic perhaps because they are used to unfavourable conditions. Nonetheless, it is still necessary to address these conditions in policy terms to avoid strong inequality across Europe and the danger of 'social dumping' (Deacon, 2000). Even if poor working conditions may not be perceived as affecting life satisfaction, public policies are needed to prevent fatal accidents and work-related diseases.

In summary, the analysis is guided by the following two key questions:

- What is the impact of quality of work on subjective life satisfaction and do any significant regional variations emerge in this context?
- What impact does work–life balance have on the relationship between quality of work and subjective life satisfaction, and are there any important regional variations in this respect?

Measuring subjective life satisfaction and quality of work

In accordance with the original formulation by Allardt (1993), quality of life consists of having, loving and being. ‘Having’ refers to material resources and living conditions, ‘loving’ refers to the social relationships that a person develops, while ‘being’ refers to the need to integrate into society and includes feelings of belonging and alienation. These concepts were tested in previous work by the Foundation (Delhey, 2004; Böhnke, 2005), with the authors also adding the dimensions of health and that of ‘doing’ or participating in society through various ways such as political engagement or voluntary work. However, this report does not consider the full range of quality of life measures, which have been described in detail elsewhere (Fahey et al, 2004; Böhnke, 2005; Delhey, 2004). Instead, it concentrates on measures of subjective well-being, something which has been the subject of much research in the past (Near, 1984; Near and Rechner, 1993; Near et al, 1987; Near, 1984).

The subjective indicators of well-being are usually life satisfaction and happiness, although some researchers have also added the indicator of material well-being. Traditionally, both life satisfaction and happiness have been tested in survey research using just one question or a single item scale, ranging from one to 10, where the high values indicate favourable levels of happiness and satisfaction. However, it is important to note that, although these two indicators of subjective well-being – that is, life satisfaction and happiness – are closely correlated, academic literature has long argued that these indicators do not measure exactly the same things and should therefore be used separately (Noll, 2000; Noll and Zapf, 1994). Some researchers contend that happiness is more related to individual-level characteristics and personality, while satisfaction depends more on economic conditions and macro-level structures (Piero, 2006; Haller and Hadler, 2006).

In previous Foundation reports, life satisfaction is mainly used, although happiness is sometimes used instead; Böhnke (2005) adds the dimension of feelings of alienation. In fact, previous empirical research across European countries indicates that a rather strong correlation exists between satisfaction and happiness although some country variations occur; for example, in the NMS, people are less likely to be satisfied but more likely to be happy. Previous research undertaken by the Foundation found that the estimated correlation coefficients between happiness and satisfaction were 0.65 for the EU15 and 0.63 for the NMS (Böhnke, 2005). Normally, in cross-national survey research, the use of multiple indicators of concepts is recommended because they are more robust and reliable cross-nationally (Harkness et al, 2002). However, following the conventions of quality of life research, only a single indicator of subjective well-being is used in this analysis. The usual strategy for measuring subjective well-being using survey data is to focus on life satisfaction (Veenhoven, 1999; Noll, 2000; Haller and Hadler, 2006). Given the survey-based nature of the investigation, an identical approach – the use of life satisfaction as the sole indicator of subjective well-being – is adopted here.

Measuring quality of work

In this analysis, quality of work is investigated on the basis of three related dimensions: working conditions; overall satisfaction with work; and perceptions of work–life balance. However, it is important to note that, as the EQLS only requested information on these three work-related dimensions from respondents who were currently employed, the bulk of the analysis is exclusively restricted to the working population in Europe.

Working conditions represent an important area of policy concern both for the Foundation and the European institutions, as well as for national governments. However, many different ways of measuring working conditions have emerged, as well as a range of different criteria that should be included. For example, the European Commission's conceptualisation of quality of work is defined according to 31 indicators across the following 10 domains: intrinsic job quality; skills, lifelong learning and career development; gender equality; health and safety at work; flexibility and security; inclusion and access to the labour market; work organisation and work-life balance; social dialogue and worker involvement; diversity and non-discrimination; and overall work performance (Kapitány, 2005). The Commission also uses three specific areas as indicators to classify the European job market, namely: job security; access to training; and hourly wages. The Foundation, on the other hand, identifies four key themes: job security; health and well-being; competence development; and combining working and non-working life (Kapitány, 2005). Meanwhile, Kapitány (2005) in a previous analysis report identified the following factors: physical stress; psychological stress; autonomy; unemployment experience; work intensity; and career opportunities.

To provide as comprehensive an analysis as possible, this report focuses on two sets of indicators that were available in the EQLS: working conditions that form part of the employment setting and subjective evaluations of the quality of work in terms of working conditions. Thus, in line with previous research (Rose, 2003), working conditions in this instance include and distinguish between the extrinsic and intrinsic aspects of the job – that is, between the job and the work. According to Rose (2003), extrinsic factors include pay, the status associated with the job, the type of contract and hours of work. Conversely, intrinsic factors, or perceptions of work, concern the work itself: for example, the extent of autonomy, stress, and interesting work tasks. Therefore, by including aspects of the employment setting as well as subjective evaluations of the quality of work, the report focuses on both aspects of working conditions.

Among the working conditions related to the employment setting is the number of working hours (Table 1); these are divided according to whether they are less than 30 hours a week, 30–40 hours a week, or over 40 hours a week. Although there is no standard definition of part-time work (Bastelaer et al, 1997), these differentiations are chosen because part-time work is usually classified as referring to those who work less than 30 hours a week, although in some countries the threshold is much lower. It is assumed that working more than 40 hours a week constitutes long hours, working less than 30 hours denotes shorter hours, while working 30–40 hours constitutes the more standard full-time working week in European countries.

The second measure of employment setting relates to whether the contract is permanent or temporary. It was not possible to include income as a measure of extrinsic job characteristics, as it was not measured in the survey at an individual level; only the question about whether people think they are well paid was included. However, some additional factors can also be taken into account when describing working conditions, including the extent of supervisory responsibilities and if the person holds a second job. A final measure of employment setting that was included was the occupational status of the worker, which gives some insight into the overall status associated with the job.⁴

⁴ In its reports on working conditions, the Foundation has defined job satisfaction as consisting of the following elements: working time; work-life balance; work-related stress; low pay/higher pay; and worker participation/involvement. Only pay and participation are not covered in the EQLS. However, the EQLS does give an insight into other factors, such as internal career opportunities and interest in the job.

The subjective measures of quality of work, including a number of intrinsic and extrinsic rewards as well as working conditions, are as follows: stress; dangerous or unhealthy working conditions; work intensity; work autonomy; career opportunities; perceptions of financial rewards; whether the work is considered dull and boring; and fear of losing one's job (Table 1). Perceptions of this kind have been used as one way of monitoring quality of work in general (Scheer, 1975). Fear of losing one's job was included as an indicator to examine in a more general way how job insecurity might affect the subjective orientations of the worker, particularly in relation to job satisfaction. For example, fear of job loss might lead people to be more satisfied with poor quality of work (Gallie, 2005). These measures embrace 'attitudes towards work', covering intrinsic and extrinsic rewards as well as levels of psychological and physiological stress. Generally, such subjective indicators measure agreement with specific characteristics of the job as perceived by the respondent. They involve a subjective description of the quality of work or the job, which subsequently becomes important in assessing the overall characteristics of working conditions.

To assess the balance between work and life, two additional measures were included in the analysis – namely, work and time pressure. These measures focused on the degree to which work competes with other aspects of people's lives, particularly with family life. The questions relate to the following issues: whether someone is too tired by work to enjoy family life; whether there is a clash of responsibilities between work and family; whether family obligations endanger the job; whether too much time is spent on the job; whether too little time is spent with the family; and whether there is not enough time for other social contacts. Broadly speaking, these measures assess the potential clash of responsibilities between work and family life, and its consequences thereof in terms of time use and perceived pressure.

Finally, as in previous research, work satisfaction is based on a single item measure, which focuses on the overall degree to which individuals are satisfied with their job. This measure should be regarded as a 'domain satisfaction'. However, it should be noted that problems have arisen when using a single item measure of this kind. For example, some researchers using the International Social Survey Programme have found little variation in job satisfaction across Europe and only weak predictors for it (Munoz de Bustillo Llorente and Macias, 2005). Meanwhile, other researchers have argued in favour of measures that include a range of different aspects of work satisfaction, such as satisfaction with working hours or satisfaction with pay (Rose, 2003). Nevertheless, the single item measure is used in this analysis, which is the only available measure in the EQLS and which differentiates between different clusters of European countries. In fact, single item measures are common in social indicators research considering life satisfaction and job satisfaction (see Near and Rechner, 1993).

Outline of analysis

Based on the data from the EQLS, this report will first consider the relationship between working conditions and life satisfaction, demonstrating how the different aspects of the work situation – both the employment setting and subjective evaluations of working conditions – affect life satisfaction. A crucial aim of the analysis is to illustrate how the different facets of work correlate with levels of life satisfaction across Europe. However, given the rather specific and job-related nature of many of the work situation measures, it could be argued that the expected relationship between these measures and the very broad 'overall' measure of life satisfaction will be, at most, somewhat weak. Thus, it is

also necessary to consider the indirect effects of the work situation on life satisfaction, as they are mediated by overall job satisfaction. Since previous studies have shown that overall job satisfaction has a strong effect on life satisfaction and that working conditions could be expected to have a strong effect on job satisfaction, it is not unreasonable to assume that the relationship between working conditions and life satisfaction is, in fact, mediated by job satisfaction. Job satisfaction, in this instance, is defined as the degree to which individuals are generally satisfied with their work.

Table 1 Measuring quality of work, by working conditions

Working conditions	Indicator	Question
Employment setting	Hours of work (less than 30 hrs, 30–40 hrs, more than 40 hrs)	Q.7: 'How many hours do/did you normally work per week (in your main job). Including any paid or unpaid overtime?'
	Nature of contract (permanent or non-permanent)	Q.4: 'Is/was your job based on: 1) an unlimited permanent contract; 2) a fixed-term contract of less than 12 months; 3) a fixed-term contract of 12 months or more; 4) a temporary employment agency contract; 5) an apprenticeship or other training scheme; 6) without a written contract; 7) other; 8) don't know?'
	Second job	Q.9: 'Apart from your main work, have you also worked at an additional paid job or business or in agriculture at any time during the last four (working) weeks?' Response categories were: 1) yes; 2) no; 3) don't know.
	Occupational status	Q.2: 'What is your current occupation?' Response categories were: 1) professional managerial; 2) other non-manual professional; 3) self-employed; 4) skilled worker; 5) non-skilled worker; 6) farmer.
	Supervisory responsibilities	Q.6: 'In your main job, do/did you have any responsibility for supervising the work of other employees?' Response categories were: 1) yes; 2) no; 3) don't know.
Subjective evaluation of intrinsic and extrinsic rewards; and of stress (psychological, physiological)	Fear of losing job	Q.11: 'Using this card, how likely do you think it is that you might lose your job in the next six months?' Response categories were: 1) very likely; 2) quite likely; 3) neither likely nor unlikely; 4) quite unlikely; 5) very unlikely; 6) don't know.
	Psychological stress	Q.12a: 'My work is too demanding and stressful.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.
	Rewards	Q.12b: 'I am well paid.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.
	Work autonomy	Q.12c: 'I have a great deal of influence in deciding how to do my work.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.
	Intrinsically unrewarding	Q.12d: 'My work is dull and boring.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.
	Career opportunities	Q.12e: 'My job offers good prospects for career advancement.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.
	Work intensity	Q.12f: 'I constantly work to tight deadlines.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.
	Physiological stress	Q.12g: 'I work in dangerous or unhealthy conditions.' Response categories were: 1) strongly agree; 2) agree; 3) neither agree nor disagree; 4) disagree; 5) strongly disagree; 6) don't know.

Table 1 (continued)

Working conditions	Indicator	Question
Additional factors: work–life balance	Work pressure	Q.13: 'I have come home from work too tired to do some of the household jobs that need to be done.' Response categories were: 1) several times a week; 2) several times a month; 3) several times a year; 4) less often/rarely; 5) never; 6) don't know. 'It has been difficult to fulfil my family responsibilities because of the amount of time I spend on the job.' Response categories were: 1) several times a week; 2) several times a month; 3) several times a year; 4) less often/rarely; 5) never; 6) don't know. 'I have found it difficult to concentrate at work because of my family responsibilities.' Response categories were: 1) several times a week; 2) several times a month; 3) several times a year; 4) less often/rarely; 5) never; 6) don't know.
	Time pressure	Q.40: 'Could you tell me if you think you spend too much, too little or just about the right amount of time in each area: my paid job/work; contact with family members living in this household or elsewhere; other social contacts (not family)?' Response categories were: 1) too much; 2) just right; 3) too little; 4) don't know; 5) not applicable.
Overall work satisfaction	Job satisfaction	Q.41b: 'Could you please tell me on a scale from one to 10 how satisfied you are with [your present job], where one means you are very dissatisfied and 10 means you are very satisfied?'

Source: EQLS, 2003

It could be argued that it is impossible to estimate this 'indirect' relationship, as some measures of working conditions and work satisfaction are so highly inter-correlated that it is not possible to distinguish between their impact; in effect, they may both be measuring the same thing. The arguments against this interpretation are twofold. Firstly, the EQLS questions on working conditions include much more information than that merely pertaining to satisfaction with one's employment conditions. Many of the attributes included in this measure do not focus on job satisfaction at all but on the actual employment conditions, as well as on agreement with various statements concerning specific aspects of work. Secondly, if job satisfaction and working conditions really measure the same thing, then it is reasonable to expect that their correlation with life satisfaction should be largely the same. Nevertheless, as the forthcoming analysis demonstrates, this is clearly not the case. In fact, job satisfaction is much more closely related to subjective well-being than the combination of indicators used to assess working conditions.

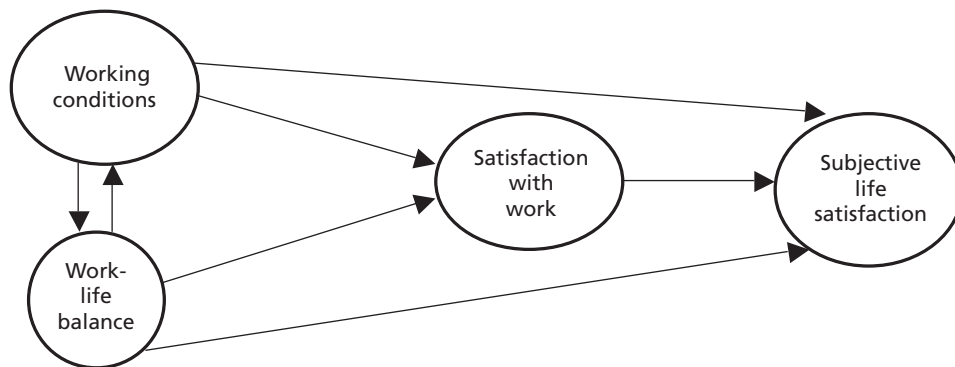
The next focus of the report pertains to the issue of work–life balance and how it impacts on satisfaction with work and satisfaction with life. The analysis of work–life balance follows the same approach as the previous one concerning the relationship between quality of work and life satisfaction. More specifically, it initially looks at the direct effects of work–life balance on subjective life satisfaction and then its potential indirect effects as mediated by overall job satisfaction.

To bring these various stages of the analysis together, a multi-level model is then constructed, which simultaneously controls for both country and individual differences. As will be discussed in the next section, the basic analytical units of this report are country groups and not individual countries. However, to make this analysis as comprehensive as possible, the report ends by focusing on differences at country level, since previous research has shown, for instance, that the meaning of a job varies considerably across countries. Although the reasons for such a variation may be related to cultural differences, it can be argued that – at least in relation to Europe – a number of economic

and societal macro-level variables should be included in the model, such as estimates for the differing unemployment rates across these various European regions and levels of wealth. The arguments in favour of this proposition contend that, although cultural variations are much lower across Europe than across the globe, considerable socioeconomic variations nevertheless exist. In fact, the 28 European countries under consideration vary substantially in terms of GDP levels and unemployment levels, to mention but a few of the crucial socioeconomic differences in Europe.

To provide a more comprehensive and robust analysis of the relationship between quality of work and quality of life, a range of the respondents' background socio-demographic characteristics are controlled for throughout the various investigations. These socio-demographic factors include: sex, age, education, marital and parental status, as well as area of residence. As briefly mentioned, previous research has demonstrated that people's socio-demographic background, most notably their sex, is an important source of variation in relation to quality of work and quality of life issues. By including socio-demographic variables in the analysis, the latter can control for their various effects and thereby estimate the impact of quality of work on life satisfaction after these background factors have been taken into account. Figure 1 illustrates the various steps of the analysis.

Figure 1 Conceptual framework for analysis of impact of working conditions and work-life balance on work and life satisfaction



To summarise, therefore, the analysis proceeds in five stages. Firstly, the relationship between working conditions and subjective life satisfaction is considered by looking at how the different work situations affect life satisfaction. The impact of work characteristics on job satisfaction is then analysed. Thirdly, the analysis looks at the indirect effects of these working conditions on life satisfaction, as mediated by job satisfaction. The issue of work-life balance is then considered, examining how it impacts on satisfaction with work on the one hand and satisfaction with life on the other. To bring these various stages of the analysis together, a multi-level model is constructed, which simultaneously controls for both country and individual differences; the model includes a number of macro-level variables, such as estimates for the differing unemployment rates across the various country groups.

Finally, before concluding the investigation, the impact of unemployment on life satisfaction is also briefly examined. However, unlike the previous analysis, the effects of unemployment are assessed in this context at the individual level. More specifically, the purpose of this part of the analysis is to explore the relationship between quality of work, unemployment and life satisfaction. As many

studies, including those of the Foundation, have shown, unemployment leads to lower levels of life satisfaction.

Methodology

All analysis is based on the EQLS, conducted in 2003 in 28 European countries. Sample sizes were approximately 1,000 respondents in each country, with the exception of Cyprus, Luxembourg, Malta and Slovenia, where the sample sizes consisted of approximately 600 respondents. The interviews are based on random samples of the population aged 18 years or older. However, as the primary focus of the investigation is on the relationship between the quality of work and life satisfaction, a large part of the analysis is restricted to individuals who are currently employed and aged 18 years and older, since these were the only people who were asked about their attitudes to and experience of work. Once the working population is selected, this reduces the initial sample size of 1,000 respondents to approximately 500 respondents per country. The sample size is reduced further as more variables are included in the analysis, which excludes more people who do not meet the precise criteria. The method of analysis used (mainly linear regression analysis) due to the exclusion of missing cases in the list also limits the sample. This means that many non-significant parameters are present in the regression models due to small sample sizes and not because the criteria included are unimportant (this will be discussed in more detail in the subsequent chapters).

Throughout the analysis, the reader should bear in mind the difficulties involved in undertaking cross-national survey research of this kind. Besides the problem of the considerable number of variables or measures included in the analysis, the issue also arises of how to present substantively meaningful results for such a large number of countries, while still highlighting their similarities but without losing sight of national variations. For example, the usual distinctions made between the EU15, the NMS and the ACC3 are mainly temporal; such distinctions disguise the fact that some of the states are post-communist countries with a particular tradition and culture of work, while others are Mediterranean countries with a very different history. Even taking into account the recent past, or the last 15 years or so, the NMS and ACC3 appear to have experienced very different trajectories to each other (European Commission, 2005a). Thus, the meaningful classification of countries is essential in the analysis.

Country cluster analyses

Although analysis at national level is obviously of interest in its own right, it is beyond the scope of this report to look in detail at all of the 28 countries covered in the EQLS. It was therefore necessary to reduce the number of units of analysis by grouping countries in a substantively meaningful and systematic manner. To do this, the findings of two sets of cluster analyses were adopted: one analysis is based on GDP criteria, previously undertaken by Fahey, Whelan and Maitre (2003), while mainly developed by the European Commission (2004); the other analysis is based on respondents' own views of quality of work in Europe. Although the individual country remains an important unit of analysis, aggregation or clustering of nations according to meaningful regions is a way of addressing the problem of 'methodological nationalism' in comparative social research (Haller and Hadler, 2004–2005).

The decision to distinguish between countries based on the findings of two alternative cluster criteria arose due to the following two considerations. Firstly, regional grouping of countries may result in a loss of important information, since clustering involves weighting populations and referring to

'averages' across a number of societies. Furthermore, this possible reduction in important information might give rise to a simplification of results, thus giving a false impression to policymakers, which is worrying since it is national policies and conditions that can make a difference. Secondly, and more importantly, given that the aim of this analysis is to assess the impact of quality of work (employment setting and working conditions) on subjective well-being (life satisfaction), in addition to distinguishing countries on the basis of GDP, a cluster analysis of countries was also undertaken to allow for a distinction between countries in terms of average levels of working conditions. In other words, by focusing on respondents' own views of working conditions in Europe, this allows for a more sensible clustering of countries according to the quality of work from a 'bottom up' perspective.

Focusing initially on the results of the 'bottom up' cluster analysis, the purpose of this particular investigation was to look for alternative clusters of countries, on the basis of respondents' views on working conditions in Europe (Figure 2). Working conditions in this instance were based on the indicators previously outlined in Table 1, the descriptive statistics for which are presented in the next chapter in Table 2 (aggregated percentages and averages at cluster level). The indicators measuring working conditions are as follows: working hours; nature of contract; supervisory responsibilities; having a second job; likelihood of losing one's job; work being too demanding; work being well paid; the degree of autonomy; the job being dull and boring; career prospects; working to tight deadlines; and dangerous or unhealthy working conditions. As the data in Figure 2 show, two large and very distinct clusters of countries emerge on the basis of perceived working conditions, broadly corresponding to eastern and western Europe and covering all countries except Turkey, which is a case in itself.⁵ As the figure clearly shows, these two clusters are substantially different from each other. To some extent, they reflect the distinction between the older EU15 Member States, on the one hand, and the NMS and ACC3 countries, on the other. However, they also represent a more coherent clustering according to the quality of work in Europe.

Within the two country clusters, a number of sub-clusters were found, which are more similar to one another, given the large difference to the other cluster found by the algorithm applied. For example, some countries resist the traditionally established and straightforward categorisation of the EU15, NMS or ACC3, as defined by EU membership. Greece and Portugal, for instance, can be found in the cluster of eastern European countries, whereas Cyprus, Malta and Slovenia fall into the cluster of mainly western EU15 countries. However, the countries which deviate in this way are those with relatively small populations and therefore do not have a large impact on the classification as a whole. Thus, it is reasonable to refer to two rather homogenous clusters of countries, which are differentiated according to working conditions.

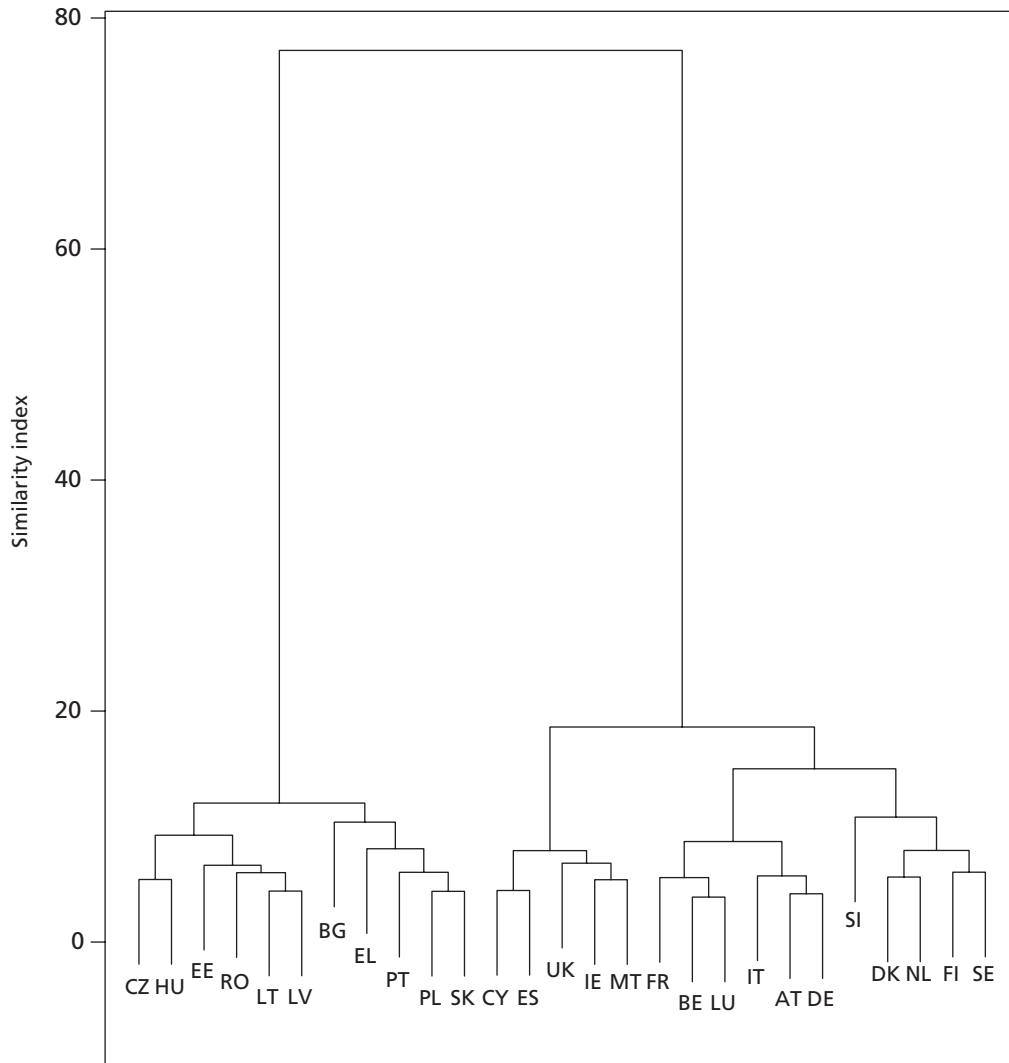
For an alternative country clustering, research previously undertaken by Fahey, Whelan and Maitre (2003), as well as the European Commission, was adopted. Instead of merely grouping the countries according to the timing of their entry to the EU, the researchers tried to establish more meaningful alternate groups of countries. Specifically, they distinguished between groups of countries on the basis of the countries' wealth – in other words, their level of GDP. Four country clusters were identified: the 12 richest EU Member States (EU12 High); the seven Member States with intermediate levels of GDP (EU7 Intermediate); the six poorest countries of the EU25 (EU6 Low); and the two acceding countries, Bulgaria and Romania, and one candidate country, Turkey (ACC3).

⁵ For this reason, Turkey is not included in the 'eastern' and 'western' clustering, but is included in the more detailed classification based on GDP levels.

To conclude, the two aforementioned analyses yielded the following clusters of European countries:

- Western Europe: Austria, Belgium, Cyprus, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Malta, Netherlands, Slovenia, Spain, Sweden, United Kingdom
- Eastern Europe: Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Slovakia.
- EU12 High: Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, Luxembourg, Netherlands, Sweden, United Kingdom
- EU7 Intermediate: Cyprus, Czech Republic, Greece, Malta, Portugal, Slovenia, Spain
- EU6 Low: Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia
- ACC3: Bulgaria, Romania, Turkey

Figure 2 Cluster analysis of working conditions in Europe



In addition, the EU25 average of all indicators and concepts is presented in the results, in order to give a more general European perspective.

As the results clearly show, the overlap between the two sets of cluster analyses is substantial. Together, the EU12 High and the EU7 Intermediate almost constitute the same group of countries as that of the 'Western European' cluster. However, this does not justify omitting the important classification of countries according to working conditions. The arguments in support of this position are threefold. Firstly, the results show that, broadly speaking, quality of work goes together with GDP, thus reinforcing the reliability and validity of both country categorisations in this instance. Secondly, as the cluster analysis of working conditions clearly demonstrates, the distinction between Eastern and Western Europe in terms of quality of work is one of the crucial findings to emerge from this investigation. Thirdly, and more importantly, as the subsequent analyses on life satisfaction clearly show, by grouping countries according to working conditions, as well as GDP, it is possible to demonstrate the additional impact of working conditions on life satisfaction in terms of two substantively meaningful settings: those which could be best described as an environment of 'good working conditions' (Western European cluster) and those in which people report less favourable conditions (Eastern European cluster). Thus, in this instance, both clusters should be considered an important advancement, providing an additional contribution to understanding the relationship between quality of work and subjective life satisfaction across the various European countries.

Overview of quality of work and subjective life satisfaction in Europe

The analyses of quality of work in all European countries are based on a detailed investigation of different aspects of work, including the employment description, working conditions, both extrinsic and intrinsic rewards, and work–life balance, as measured by the perceptions of the respondents. This section presents descriptive findings concerning the indicators of rewards, working conditions, work–life balance, job satisfaction and life satisfaction, along with an elementary bivariate analysis of the relationship between gender and some of these various measures, most notably employment setting, work–life balance and both job and life satisfaction (see Figures 3–8). The decision to focus on differences according to sex was based on previous research regarding the differing experiences of men and women in relation to work–life balance and the so-called ‘satisfaction paradox’, which suggests that although women (and lower-skilled workers) generally do the poorer quality jobs, they are nevertheless satisfied with their work.

Overall, the results suggest that quality of work is better in western and more affluent European countries. Furthermore, there is little evidence to suggest that any variation occurs in this relationship by sex. In other words, irrespective of sex, people in the richest countries appear to be the most satisfied with both the quality of their work and with their lives in general. In these countries, work is, for example, less demanding, healthier, better paid, more autonomous, less boring, and offers more career prospects. The findings also revealed shorter working hours in these countries, along with a higher proportion of people with supervisory responsibilities. Moreover, although an unbalanced work and family life is relatively common in Western Europe, it appears to be a more significant problem in Eastern Europe, where a large share of the working population complains about a clash of responsibilities between family life and their job. Finally, both work satisfaction and life satisfaction are higher in Western Europe compared with Eastern Europe and this correlates with levels of GDP.

Employment context

Focusing initially on the employment environment, the following indicators were used: working hours; type of employment contract; supervisory responsibilities; and having a second job (Table 2). In other words, the focus was mainly on measures that describe the job from a more objective point of view. In relation to working time, lower working hours were observed in the Western European countries, which are also the most prosperous (EU12 High). Only one third (30%) of people in these Western European countries work more than 40 hours a week, compared with 53% of respondents in the Eastern European countries and 65% of people in the ACC3. Moreover, in the ACC3 in particular, more people work very long hours – that is, more than 45 hours per week – than people in Western Europe do. Some 60% of respondents in the ACC3 reported that they work more than 45 hours a week, compared with 38% of people in the least prosperous EU countries (EU6 Low). Since this includes the total number of hours worked in all jobs, this may reflect the tendency towards working multiple jobs in some parts of Europe, particularly in eastern and southern European countries, where a large informal economy exists alongside the formal economy (Neef and Stanculescu, 2002; Sik, 1993).

Table 2 Indicators of employment setting, by country cluster

Employment setting							
	Working time				Contract % unlimited contract	Supervisory responsibilities % yes	Second job % yes
	Average no. of hrs	% less than 30 hrs	% more than 40 hrs	% more than 45 hrs			
Western Europe	39.2	15	30	20	68	33	5
Eastern Europe	45.8	6	53	40	70	25	8
EU12 High	38.9	15	29	20	70	34	5
EU7 Intermediate	42.7	10	42	29	58	25	6
EU6 Low	44.9	8	51	38	71	24	8
ACC3	50.7	6	65	59	49	31	7
EU25	40.5	13	34	30	68	32	5

Source: EQLS, 2003

Shorter working hours – 30 hours or less – appear to be much more common in Western Europe than in Eastern Europe. In the western countries, part-time work is undertaken for a variety of reasons, an important one being the way in which women combine employment and family life (Walsh, 1999; O’Reilly and Fagan, 1998). Part-time work is less common in Eastern Europe and, according to the EQLS findings, only 6% of respondents in the ACC3 work part time or less than 30 hours a week. Further analyses show that in Eastern Europe, people who work part time reported lower levels of job satisfaction. This can be attributed to the fact that, as wages for full-time work are relatively low, part-time work is unsustainable for most people. At the same time, part-time work is not necessarily seen as a way of balancing work and family life; more often, it is used as part of a pre-retirement or post-retirement strategy or constitutes part of a company’s policy for avoiding mass redundancies (Jager et al, 2004; Cousins and Tang, 2003; Wallace, 2003b).

The number of people with a permanent employment contract varies across Europe in line with labour market regulations. In the ACC3 – Bulgaria, Romania and Turkey – a substantially lower proportion of people were found to have unlimited contracts. In relation to supervisory responsibilities and/or having a second job, the differences across Europe were not as extensive, at least not at cluster level. Approximately one third of all European respondents at work engage in such supervisory responsibilities, while less than 10% of people have a second job.

Subjective evaluation of working conditions

A different picture emerges in relation to people’s subjective perceptions of their working conditions (Table 3). In this context, striking differences can be found between the European countries, mainly between the richer and poorer countries, but also between the western and eastern as well as northern and southern countries (Greece, Portugal and Spain belong to the EU7 Intermediate cluster). Job security, for example, is relatively high among western Europeans: 80% of people in Western Europe report that job loss is unlikely, compared with 60% of respondents in the Eastern Europe cluster and 55% of those living in the ACC3. Clearly, the richer the country, measured in GDP levels, the more widespread the feelings of job security appear to be.

Table 3 Respondents' perceptions of working conditions, by country cluster, %

Percentage of respondents who agree with following statements								
	Loss of job unlikely	Work is too demanding	Job is well paid	Autonomy at work	Job is boring	Good career prospects	Tight deadlines	Dangerous/unhealthy conditions
Western Europe	80	46	43	65	10	36	47	14
Eastern Europe	60	52	23	50	17	26	41	29
EU12 High	80	46	44	66	10	35	47	13
EU7 Intermediate	70	48	35	57	14	36	43	20
EU6 Low	61	50	20	50	20	27	44	32
ACC3	55	66	24	52	29	31	42	27
EU25	76	47	39	63	11	34	46	17

Source: EQLS, 2003

A similar picture emerges when people are asked if they think their job is too demanding. In the ACC3 in particular, many people report this kind of psychological stress at work. Differences are also apparent between western and eastern countries in relation to the perception of financial rewards. In Western Europe, 43% of people agree with the statement that they are well paid, whereas only 23% of respondents in the Eastern Europe cluster report that this is the case. People in the western European countries also report higher levels of influence over their work and are less likely to indicate that they work in boring jobs. Other intrinsic prospects, such as career opportunities, are somewhat more frequent in the Western Europe cluster, although such differences are not very large; for example, an eight percentage point difference is observed between the EU12 High and the EU6 Low. The perception of work intensity (tight deadlines) is also quite similar between the clusters, although higher levels can be observed in the Western European group of countries. In terms of physical stress in the workplace, jobs are more often described as being unhealthy and dangerous in the Eastern European countries, particularly in those countries with low levels of GDP (EU6 Low).

Perceptions of work–life balance

The respondents' experiences of work–life balance appear to be rather varied across Europe (Table 4). Two sets of questions were used to assess work–life balance. Firstly, work pressures were considered in terms of whether respondents felt too tired from their job to adequately participate in family life, whether they experienced a clash of responsibilities between work and family life, or whether family life impinged on their work. Secondly, time pressures were considered in terms of whether respondents felt that they spent too much time in their job, whether they spent too little time with their family, or whether they had too little time for social contacts.

The results suggest that, in general, people in the Eastern Europe cluster have a more negative experience of work–life balance. A large proportion of the working population (39%) in these countries complain about a clash of responsibilities between family and the household, on the one hand, and their job, on the other. Moreover, 61% of respondents in the Eastern Europe cluster report that they often arrive home from work too tired to carry out any housework, while 14% report that their family life impinges on their concentration at work quite often – that is, at least several times a

month. In the Western Europe cluster, these figures are somewhat lower, although a lack of balance between work and family life is also common in these countries. The wealth of the country, as measured by GDP levels, appears to affect people’s work–life balance: those living in the less affluent countries, for example in the EU6 Low or ACC3, more often lead an unbalanced life than those in the more affluent European countries.

Table 4 Respondents’ perceptions of work–life balance, by country cluster, %

	Work pressure (% often)			Time pressure (%)		
	Too tired from job	Clash of responsibilities	Family impinges on job	Too much time spent on job	Too little time for family	Too little time for social contacts
Western Europe	52	26	10	30	26	32
Eastern Europe	61	39	14	34	22	40
EU12 High	50	25	9	30	27	30
EU7 Intermediate	58	33	12	35	19	27
EU6 Low	60	42	15	31	20	38
ACC3	59	46	22	54	28	43
EU25	53	29	11	31	25	33

Source: EQLS, 2003

In relation to time pressures, people in the ACC3 cited the greatest problems, with 54% of respondents reporting that they spend too much time on the job and 43% of people indicating that they have too little time for social contacts. A slightly higher proportion of people (28%) in these countries, compared with the EU25 (25%), also reported that they do not have enough time for family life. While time pressures do not seem to be as severe in other European countries as they are in the ACC3, approximately one-third of respondents in the EU25 still feel that they spend too much time on the job and that they do not have enough time for social contacts.

Comparing the various indicators, it appears that the greatest problem in relation to work–life balance is the degree to which work negatively impinges on home life: the most common problem cited by respondents is being too tired from work to carry out household tasks, followed by a clash of responsibilities at the expense of family life, followed by the risk of poor work performance due to an unfavourable work–life balance. Moreover, as noted above, there appears to be a correlation between a country’s level of GDP and people’s work–life balance: respondents in the less prosperous countries, for example in the EU6 Low or ACC3, are more likely to cite problems with work–life balance than those in the most affluent European countries. This is not surprising, given the very long working hours that were reported in the ACC3, where nearly two-thirds of the working population work more than 40 hours a week.

Job satisfaction and life satisfaction

A striking difference emerges between Western and Eastern Europe when job and life satisfaction are considered. In terms of levels of job satisfaction, people in the Western Europe cluster are more satisfied than those in Eastern Europe. On a 10-point scale, where the higher values denote greater levels of satisfaction, Western Europeans score 7.4, while Eastern Europeans report a job satisfaction

level of 6.9 (Table 5). Within the EU, people in the 12 richest countries (EU12 High) report the highest levels of job satisfaction, while respondents in the EU6 Low reported the lowest levels of job satisfaction (6.8) of all countries studied.

Table 5 Average levels of job satisfaction and life satisfaction, by country cluster

	Job satisfaction	Life satisfaction
Western Europe	7.4	7.4
Eastern Europe	6.9	6.4
EU12 High	7.5	7.4
EU7 Intermediate	7.0	7.2
EU6 Low	6.8	6.4
ACC3	7.2	5.8
EU25	7.2	7.2

Note: Results are based on a 10-point scale, where the higher values indicate greater levels of satisfaction.

Source: EQLS, 2003

Life satisfaction is also higher in Western Europe. This is reflected in the results for the GDP clusters: people living in the EU12 High are the most satisfied with their lives, showing an average score of 7.4 on the 10-point scale, while those living in the EU7 Intermediate show only a slightly lower average score of 7.2. Life satisfaction is substantially lower in the EU6 Low, where an average score of 6.4 is found. However, the lowest life satisfaction score of 5.8 can be found in the ACC3. Thus, people living in the poorer parts of Europe report substantially lower levels of life satisfaction.

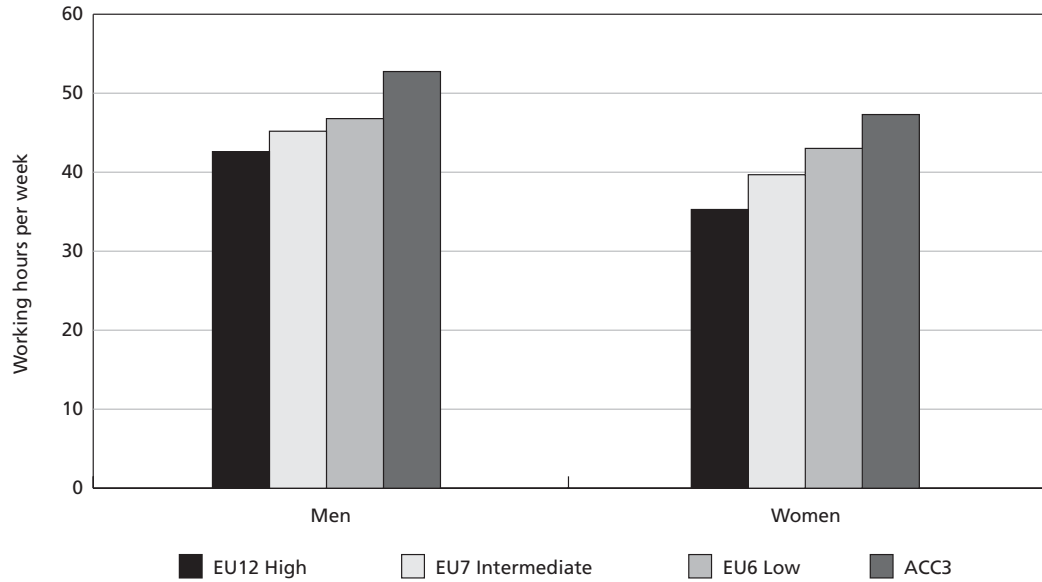
Gender differences in working conditions and work–life balance

The results clearly indicate that both quality of work and satisfaction with life appear to be higher in the western and more affluent European countries. To what extent, however, does this relationship hold when gender differences are taken into account? As previously outlined, analysis of the potentially mediating impact of sex may be considered particularly appropriate in light of previous research regarding differing experiences of work–life balance between men and women, and the so-called ‘satisfaction paradox’.

In order to briefly assess potential differences between men and women in relation to their quality of work and subjective well-being, it is necessary to report the findings in terms of some of the previously discussed measures. These include average working hours, attitudes towards pay, certain work–life balance issues, job satisfaction, and life satisfaction. For the sake of analytical clarity, the findings are presented for just one of the country cluster types – namely, those differentiated according to countries’ levels of GDP.

Focusing initially on working hours, the results clearly show that women work fewer hours, on average, than men do (Figure 3). The patterns across country clusters are quite similar in this respect.

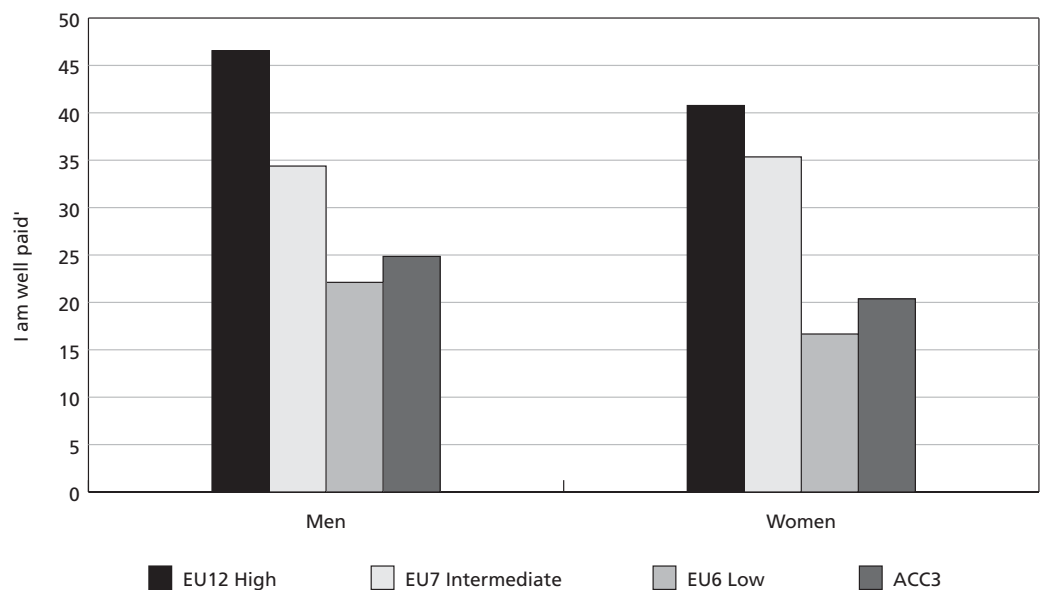
Figure 3 Gender differences in number of working hours, by country cluster



Source: EQLS, 2003

Gender differences can also be observed in relation to respondents' attitudes towards extrinsic rewards (Figure 4). For example, when asked if they agreed with the statement 'I am well paid', fewer women than men gave an affirmative answer in all of the country clusters, with the exception of the EU7 Intermediate.

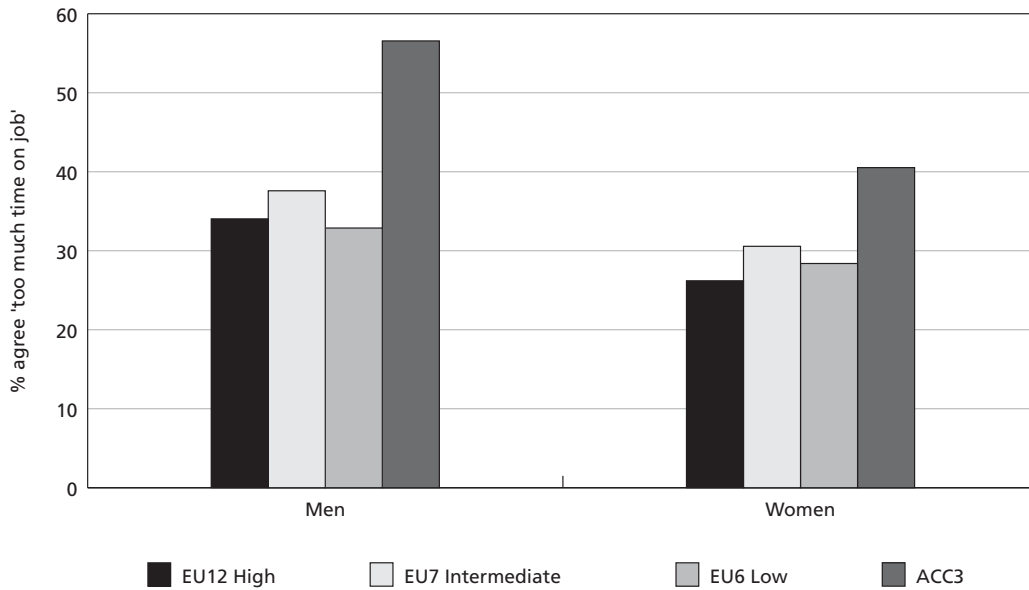
Figure 4 Gender differences in relation to statement 'I am well paid', by country cluster, %



Source: EQLS, 2003

In relation to time pressures, considerable gender differences were found in the ACC3 (Figure 5). In that group of countries, more men than women reported that they spend too much time on the job; this may be attributed to the very long working hours of men in Bulgaria, Romania and particularly in Turkey. Interestingly, the gender differences in this respect are far less pronounced across the remaining three country clusters.

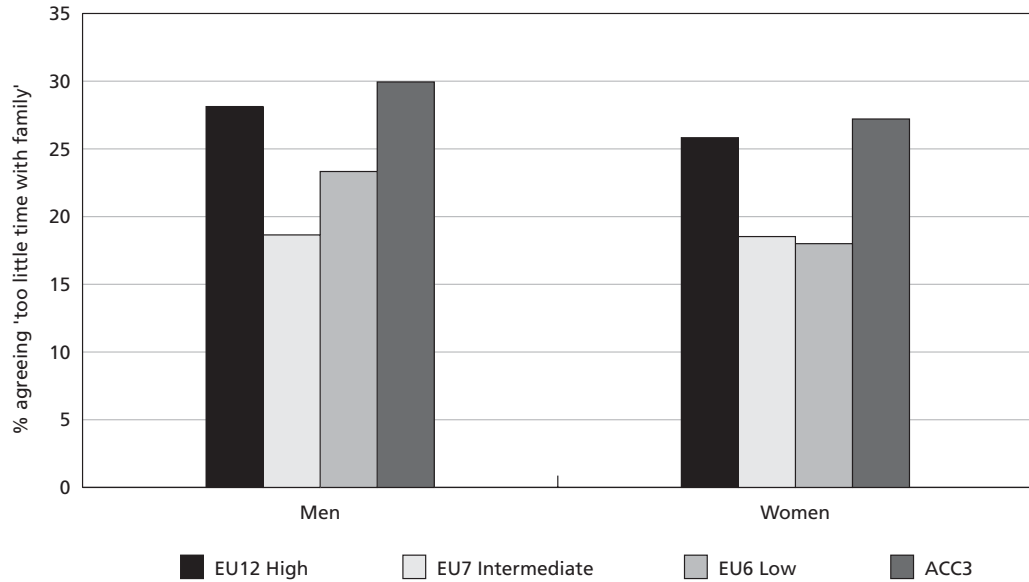
Figure 5 Gender differences in spending too much time at work, by country cluster, %



Source: EQLS, 2003

Gender differences were also only marginal in relation to the issue of work–life balance (Figure 6), with only a slightly higher proportion of men than women reporting that they spend too little time with their family. Two interesting patterns emerge in this respect. In the EU7 Intermediate and EU6 Low, fewer people reported that they spend too little time with their family compared with those in the EU12 High and ACC3.

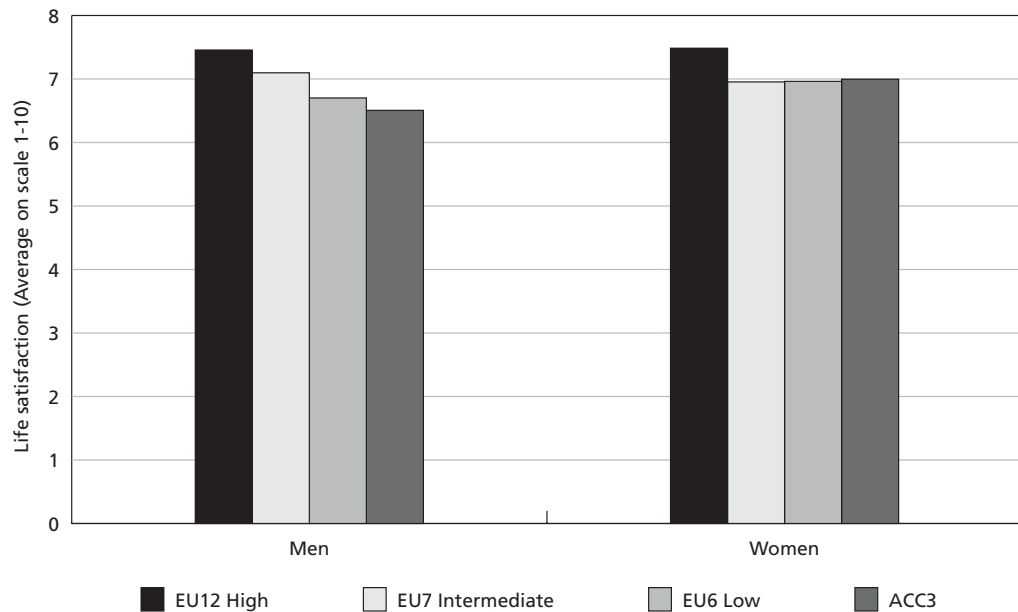
Figure 6 Gender differences in spending too little time with family, by country cluster, %



Source: EQLS, 2003

In relation to job satisfaction (Figure 7), the gender differences were only marginal in the EU12 High and EU7 Intermediate. In the other two country clusters – the EU6 Low and ACC3 – women reported significantly higher levels of job satisfaction than men did; the gender differences were most pronounced in this respect in the ACC3.

Figure 7 Gender differences in levels of job satisfaction, by country cluster

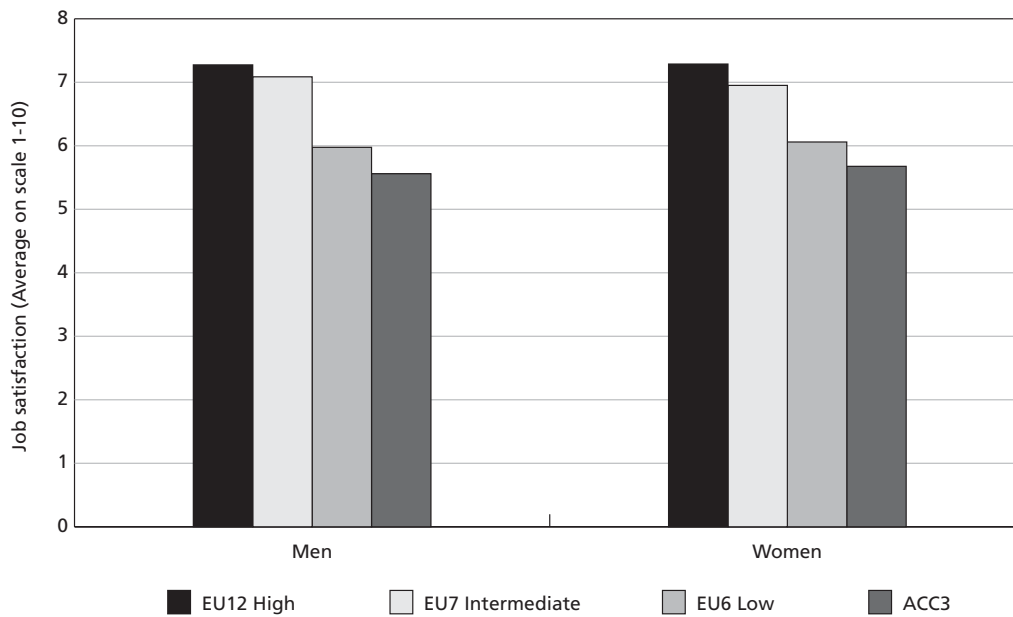


Note: Results are based in a 10-point scale, where the higher values indicate greater levels of job satisfaction.

Source: EQLS, 2003

Finally, in terms of life satisfaction (Figure 8), no gender differences emerged in this respect, as men and women reported the same levels of life satisfaction. Thus, although considerable variations in life satisfaction emerged across country clusters, no gender differences are apparent in relation to their reported levels of subjective life satisfaction. The ‘satisfaction paradox’ is therefore not widespread, but may be an issue in poorer countries where merely earning a living constitutes a primary goal for many people.

Figure 8 Gender differences in levels of life satisfaction, by country cluster



Note: Results are based in a 10-point scale, where the higher values indicate greater levels of life satisfaction.
Source: EQLS, 2003

To summarise, the results of this descriptive analysis indicate so far that quality of work, along with both job satisfaction and life satisfaction, appear to be better in the western and more affluent European countries. Furthermore, little evidence emerges to suggest that any greater variation arises in terms of gender among this group of countries. A similar result was found when potential differences in other socio-demographic characteristics, such as age and area of residence, were investigated. In other words, irrespective of socio-demographic background, people in the richest countries appear to be the most satisfied not only with the quality of their work but also with their lives. However, the question remains as to what extent quality of work issues and subjective well-being are related. In other words, does good quality of work lead to higher levels of life satisfaction?

Impact of working conditions on life satisfaction

Focusing initially on the first stage of the analysis – that is, the relationship between quality of work and life satisfaction – this section presents the findings in relation to average levels of life satisfaction according to employment setting and perceptions of working conditions (Table 6). Although all of these findings are based on survey questions, and are therefore subjective, they can nevertheless be distinguished according to factors that are more external and factors that are more subjective.

External factors such as occupational status, hours worked, type of employment contract, supervisory responsibilities and whether the respondent has a second job form part of the 'employment setting'; more subjective evaluations of work, such as perceived danger of losing one's job, work stress, whether the job is considered well paid, work autonomy, whether the job is boring, career prospects, and dangerous working conditions can be termed as 'perceptions of working conditions'.

The results outlined illustrate the direct influence of these aspects of quality of work on people's life satisfaction. Overall, they point to a rather weak association between quality of work and life satisfaction, particularly when perceptions of working conditions are considered. This finding is also supported by other studies which were carried out in the US (Harwood and Rice, 1992). Instead, the key influential factor in this instance is region. Irrespective of employment setting and working conditions, differences in life satisfaction are most pronounced between the Western Europe cluster of countries and that of Eastern Europe. In fact, these differences in life satisfaction are so great that people in western countries who experience unfavourable working conditions still report higher levels of life satisfaction than those experiencing the best working conditions in the eastern European countries or in the ACC3. This is not to deny, however, that some notable differences in overall life satisfaction also exist between the western nations, particularly between the most affluent EU countries (EU12 High) and the poorest countries (EU6 Low).

Employment setting

In relation to the number of working hours, no significant differences emerged among the country clusters with respect to levels of subjective life satisfaction, regardless of whether people worked part time, full time, or long hours. In Western Europe, the average level of subjective well-being is 7.3 on a 10-point scale across all three categories of working hours (less than 30 hours a week; between 30 and 40 hours a week; over 40 hours a week). Only in the Eastern Europe cluster, which includes the ACC3, are small differences in life satisfaction observed as a result of fewer weekly working hours.

These findings make sense in the context of quality of life research, where it is the 'domain satisfaction' that has the most weight, with a 'spill over' visible between the domains. Hence, based on this hypothesis, working conditions and other aspects of work quality could be expected to correlate more with job satisfaction than with life satisfaction.

Perceptions of working conditions

More significant differences in life satisfaction can be found in relation to job security, payment and intrinsic job characteristics such as 'boring work'. This can be illustrated by looking at the perceptions of job security. Respondents in Western Europe (particularly the EU12 High) who fear job loss still experience the same or even higher levels of life satisfaction than people in Eastern Europe or in the ACC3 who do not report such fears. The differences within each country cluster are also substantial. On a 10-point scale, a 0.8 point difference was found in levels of life satisfaction between those citing job security and those perceiving a lack of job security in both the EU12 High and EU7 Intermediate. In the remaining clusters, these differences are even more substantial. Job security, therefore, seems to influence levels of life satisfaction to a considerable degree in all European countries.

Table 6 Average level of subjective life satisfaction, by working conditions and country cluster

Working conditions	Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Employment setting							
Occupation							
Professional managerial	7.7	6.4	7.7	7.4	6.4	6.4	7.5
Other non-manual professional	7.4	6.3	7.3	7.2	6.2	5.9	7.2
Self-employed	7.4	6.4	7.4	7.3	6.1	5.8	7.2
Skilled worker	7.0	5.7	7.0	6.7	5.8	5.3	6.6
Non-skilled worker	6.8	5.2	6.8	6.5	5.2	4.7	6.6
Farmer	7.0	6.3	7.0	6.9	6.0	5.4	6.7
Working hours							
Less than 30 hours a week	7.3	6.2	7.3	7.1	6.1	6.0	7.2
Between 30 and 40 hours a week	7.3	6.0	7.2	7.1	6.0	5.9	7.1
More than 40 hours a week	7.3	6.0	7.3	6.9	5.9	5.5	7.0
Contract							
Unlimited	7.4	5.9	7.4	7.0	5.9	5.8	7.1
Long-term	7.1	6.1	7.0	7.1	6.2	6.3	6.9
Short-term	7.0	5.6	6.8	7.2	5.5	5.2	6.8
Supervisory responsibilities							
Yes	7.5	6.3	7.5	7.3	6.3	6.0	7.4
No	7.2	5.9	7.1	6.9	5.8	5.4	6.9
Second job							
Yes	7.6	6.4	7.7	6.8	6.6	6.0	7.3
No	7.4	6.3	7.4	7.2	6.3	5.7	7.2
Perceptions of working conditions							
Danger of job loss							
High	6.8	5.4	6.7	6.6	5.5	4.7	6.4
Neither high nor low	6.9	6.3	6.8	6.9	6.3	6.1	6.7
Low	7.6	6.7	7.5	7.4	6.6	6.1	7.4
Work too demanding							
Yes	7.3	6.2	7.3	7.0	6.2	5.6	7.1
Neither/nor	7.3	6.4	7.3	7.2	6.2	6.0	7.1
No	7.6	6.6	7.6	7.4	6.7	6.1	7.5
Well paid							
Yes	7.8	7.2	7.8	7.6	7.1	6.8	7.7
Neither/nor	7.3	6.7	7.3	7.2	6.9	6.1	7.2
No	6.9	5.8	6.8	6.7	5.8	5.0	6.7
Good autonomy							
Yes	7.6	6.5	7.6	7.4	6.5	6.1	7.4
Neither/nor	7.1	6.4	7.1	6.9	6.4	5.6	7.0
No	6.9	6.0	6.9	6.8	6.0	5.3	6.8
Job is boring							
Yes	6.5	6.0	6.4	6.4	6.1	5.0	6.4
Neither/nor	7.0	6.3	7.0	7.0	6.2	5.7	6.9
No	7.6	6.5	7.6	7.4	6.5	6.2	7.4
Good career prospects							
Yes	7.7	6.9	7.7	7.6	6.9	6.3	7.6
Neither/nor	7.5	6.5	7.4	7.2	6.5	6.0	7.3
No	7.1	6.0	7.0	6.8	6.0	5.3	6.8
Tight deadlines							
Yes	7.3	6.3	7.3	7.2	6.2	5.6	7.2
Neither/nor	7.4	6.4	7.4	7.0	6.5	5.7	7.2
No	7.4	6.4	7.4	7.2	6.5	6.0	7.3
Dangerous/unhealthy conditions							
Yes	7.0	5.9	7.0	6.7	6.1	5.1	6.7
Neither/nor	7.1	6.5	7.1	6.9	6.5	5.8	6.9
No	7.5	6.5	7.5	7.4	6.5	6.0	7.4

Q. 31: 'All things considered, how satisfied would you say you are with your life these days? Please tell me on a scale of one to 10, where one means very dissatisfied and 10 means very satisfied.'

Source: EQLS, 2003

The same is true for other extrinsic factors. Among the respondents who agreed with the statement 'I am well paid', the average level of life satisfaction was 7.8 in Western Europe and 7.2 in Eastern Europe. These levels were much higher compared with the levels found among those who rejected this statement: in Western Europe, this variation amounted to a 0.9 point difference in life satisfaction between those who believe that they are well paid and those who do not; in Eastern Europe, this variation was even higher at 1.4 points of a difference, highlighting the substantial impact of extrinsic rewards on life satisfaction.

In Western Europe, respondents who indicated that they worked in boring jobs reported the same levels of life satisfaction as those in Eastern Europe who did not feel that their job was boring, and showed even higher levels of life satisfaction than people with interesting jobs in the ACC3. In particular, having an interesting job and good future career prospects are relatively important sources of life satisfaction, whereas the remaining indicators of working conditions, particularly work stress, are less likely to influence levels of subjective well-being across Europe. Given the importance that is placed on work stress and stress management in contemporary discourse, it is somewhat surprising that stress seems to be a relatively unimportant factor in determining life satisfaction, although it may be important for other reasons.

It is interesting to note that although particular aspects of the job, such as job security, payment or having an interesting job, all play an important role in determining life satisfaction, their impact does not vary to the same extent in Western Europe as it does in the other countries. One plausible explanation for this finding is the differing levels of modernisation and the weight of materialist as opposed to post-materialist values in the various nations. Since the western nations are characterised by more post-materialist values (Inglehart, 1990), it is possible that considerations other than work would be paramount in deciding quality of life issues in such countries. This is in contrast to the more materialist NMS and ACC3, where work still remains a primary influence.

This finding supports the 'needs hierarchy' hypothesis, whereby survival needs are a source of satisfaction in the poorer regions of Europe, while ego needs and self-actualisation are more common in the wealthier parts of Europe where survival is no longer an issue. This analysis indicates that the needs hierarchy is related to levels of development in the different parts of Europe. At the same time, economists have introduced the concept of the 'hedonic treadmill' for explaining the lack of variation in the relationship between particular aspects of the job and life satisfaction among western European nations. They argue that, as basic needs are fulfilled (again referring to Maslow's 'hierarchy of needs'), people begin to adjust their levels of happiness to suit their situation and start to aspire to other needs on the next level to become happy. For instance, once the need for a job with a sufficient income is fulfilled (material needs), people may start to look at the content and quality of the job in order to be satisfied (social and ego needs); thus, the bar for being satisfied is always being raised (Hajiran, 2006).

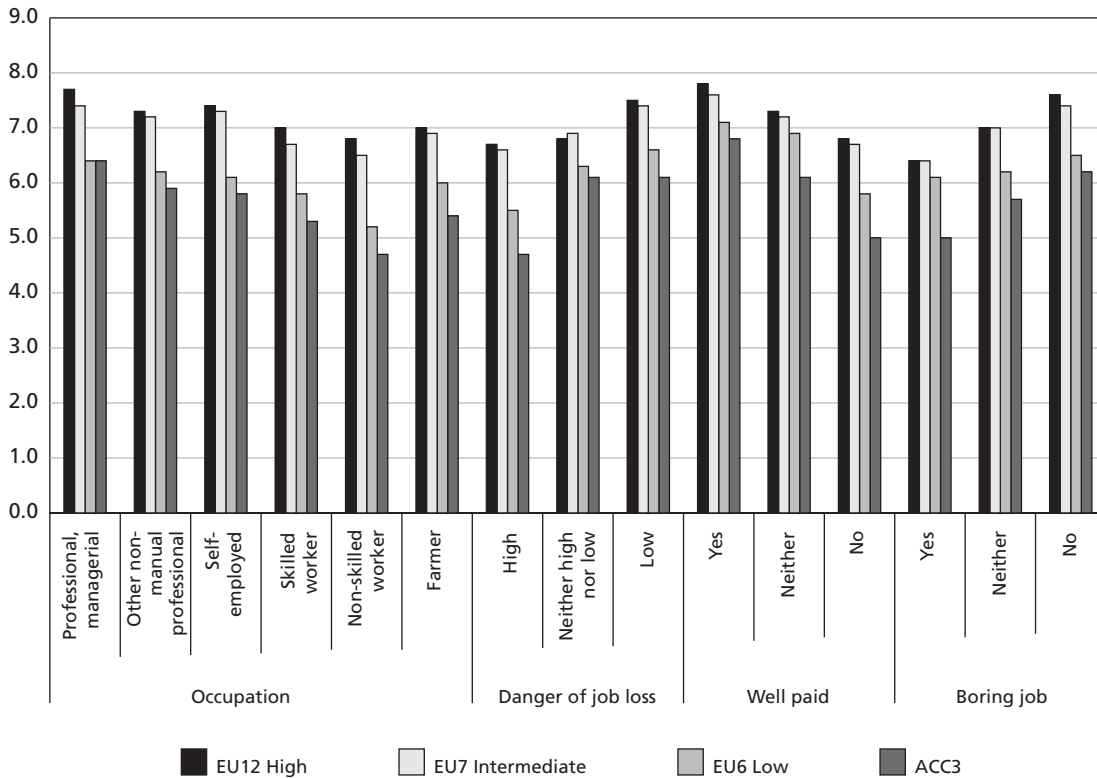
Key factors of working life influencing life satisfaction

Figure 9 illustrates the most striking differences in terms of the relationship between aspects of quality of work and levels of subjective life satisfaction. The results are presented in terms of the country clusters differentiated according to their level of GDP.

Among the various occupational groups, unskilled workers generally report the lowest levels of life satisfaction in all country clusters. However, the cross-national perspective shows that unskilled

workers in the most prosperous European countries, that is the EU12 High, report higher levels of life satisfaction than professionals or managers in the EU6 Low. At least as far as subjective well-being is concerned, this suggests to a limited extent that being an unskilled worker in western Europe is more favourable than being a highly qualified employee in the poorest regions of Europe.

Figure 9 Key factors of working life influencing levels of life satisfaction, by country cluster (average level of life satisfaction)



Note: Results are based in a 10-point scale, where the higher values indicate greater levels of life satisfaction.
 Source: EQLS, 2003

To summarise, therefore, a somewhat different relationship emerges between employment setting and life satisfaction, on the one hand, and perceived working conditions and life satisfaction, on the other. For instance, working hours, type of contract, supervisory responsibilities, having a second job, stress and dangerous conditions at work are weakly related to life satisfaction; in contrast, occupational status along with job security and good pay show substantially stronger relationships with regard to subjective well-being. However, many of these relationships are strongly regionally differentiated in that: a) the differences are more severe in poorer than in richer European countries; b) being worse off in richer countries still leads to higher satisfaction levels than being well-off in the poorer European countries.

This raises a series of questions. Firstly, to what extent do these relationships remain, even when a range of background factors such as sex, age and education are taken into account? Secondly, are people’s perceptions of work of greater importance in determining subjective life satisfaction across Europe than more objective criteria such as occupation, working hours and supervisory

responsibilities? Thirdly, which of the various factors is more important in determining life satisfaction? It is to these questions that the analysis now turns. Using a series of multiple regression analyses, the impact of these various indicators – employment setting and perceptions of working conditions – on subjective life satisfaction across European regions is analysed, controlling for a series of socio-demographic background factors such as sex, age and education.

Assessing significance of working conditions for life satisfaction

Table 7 presents the results of the multivariate regression analysis. A total of three groups of variables were classified: socio-demographic controls such as sex, age and education; five variables referring to the employment setting, namely occupation, working hours, type of contract, supervisory responsibilities, and having a second job; and seven indicators of perceptions of working conditions. The highlighted regression coefficients are statistically significant. In total, the explanatory power of the model is low; given the high number of 12 predictor indicators (not counting the socio-demographic controls), the models explain between 15% and 18% of the variation in life satisfaction.

The results suggest that neither socio-demographic variables nor those for employment setting, such as occupation, working hours and type of contract, affect subjective life satisfaction to any great extent. Instead, working conditions – as measured by attitudinal questions – have a significant effect on subjective life satisfaction. This finding is derived from the significant share of variation in life satisfaction – for instance, amounting to 14% in the EU25 cluster – explained by these work-related indicators in this analysis. Given the relatively large number of predictors included in the analysis, this proportion is, surprisingly, not very large, despite its statistical significance. Nonetheless, the analysis reveals that among the most influential predictors of life satisfaction are job security, and intrinsic and extrinsic rewards.

Thus, it appears that although there is a relationship between working conditions and life satisfaction, this direct relationship is not very strong. Furthermore, it goes against common expectations to suggest that life satisfaction is heavily determined by one's employment setting, such as hours of work and duration of contract. Instead, it is found that perceptions of working conditions explain more in terms of life satisfaction.

Hence, comparing the effects of employment setting and perceptions of working conditions, the employment situation seems to be of much less importance than subjective perceptions of the job. In fact, life satisfaction appears to be influenced more by the latter group of indicators in all countries. Three findings, in particular, are worth mentioning, concerning the relationship between life satisfaction and perceptions of the job.

Firstly, perceptions of job security influence life satisfaction to an equal extent in all of the countries. The higher the risk of losing one's job, the lower the level of life satisfaction in western and eastern European countries. This is not the case, however, when attitudes towards pay are considered; some notable regional variations emerge in relation to this issue. Although perceptions of not being well paid correlate negatively with life satisfaction across all seven country clusters (including the EU25), the impact of this attitude is more severe in the less affluent countries (Eastern Europe, EU6 Low and ACC3). Thus, the perception of having an inadequate salary decreases life satisfaction in these poorer countries to a larger extent than it does in the richer countries. Therefore, in line with previous expectations, it appears that extrinsic rewards are more important in the poorer countries because of the essential need for money to satisfy the most basic needs.

Table 7 Regression analysis of impact of working conditions on life satisfaction, by country cluster

Parameters	Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25	
Socio-demographic control variables								
Sex (male)	-0.02	0.00	-0.02	-0.02	-0.01	0.10	-0.02	
Age	-0.08	-0.08	-0.07	-0.10	-0.10	-0.04	-0.07	
Education (secondary)	None	-0.06	-0.02	-0.06	-0.01	-0.02	0.01	-0.02
	Primary	0.05	-0.04	0.04	0.01	-0.08	0.01	0.02
	University	0.00	0.07	0.00	-0.01	0.14	0.00	0.01
Partner (no)	0.14	0.08	0.14	0.09	0.06	0.05	0.11	
Children (no)	-0.01	-0.01	-0.01	-0.03	0.07	-0.01	-0.01	
Single parent (no)	-0.01	-0.03	-0.01	-0.04	-0.05	-0.03	-0.02	
Area (rural)	0.01	-0.01	0.01	0.06	-0.03	0.04	0.02	
Employment setting								
Occupation (non-manual)	Farmer	-0.04	0.01	-0.03	-0.01	-0.01	-0.07	-0.03
	Self-employed	-0.05	-0.03	-0.05	-0.02	-0.09	-0.09	-0.06
	Professional	0.01	-0.01	0.02	-0.05	-0.04	0.00	-0.01
	Skilled	-0.03	-0.03	-0.03	-0.03	-0.01	-0.07	-0.03
	Non-skilled	0.01	-0.07	0.01	-0.03	-0.05	-0.12	0.00
Working hours		0.00	-0.01	-0.01	0.01	-0.05	0.01	-0.04
Contract (unlimited)	Long-term	0.03	0.02	0.04	0.01	0.02	0.03	0.03
	Short-term	0.01	-0.01	0.00	0.04	0.00	-0.03	0.01
	Oral	0.01	-0.01	0.02	-0.06	-0.05	-0.09	-0.01
	Other	0.00	0.00	-0.01	0.02	-0.03	0.00	0.00
Supervisory responsibilities (no)		0.00	0.04	0.00	0.01	0.08	0.08	0.02
Second job (no)		0.02	-0.01	0.03	-0.04	0.03	0.02	0.01
Perceptions of working conditions (direction: disagree)								
Risk of losing job (high)		0.11	0.12	0.11	0.08	0.09	0.09	0.13
Psychological stress (too demanding)		0.06	0.08	0.07	0.03	0.07	0.02	0.05
Rewards (good pay)		-0.15	-0.21	-0.16	-0.13	-0.20	-0.19	-0.17
Autonomy (influence)		-0.08	0.03	-0.08	-0.08	0.02	0.00	-0.06
Internal rewards (boring)		0.13	0.00	0.12	0.13	-0.01	0.06	0.10
Career (good prospects)		-0.06	-0.06	-0.05	-0.09	-0.09	-0.07	-0.07
Work intensity (tight deadlines)		0.01	0.03	0.01	0.02	0.08	0.01	0.01
Physical stress (unhealthy conditions)		0.07	0.07	0.07	0.08	0.01	0.01	0.08
N								
		6011	4024	4863	2446	2025	966	9462
R ²								
		0.16	0.16	0.16	0.15	0.18	0.15	0.16
R ² ('work' indicators)								
		0.12	0.11	0.13	0.11	0.10	0.11	0.14

Notes: Results of ordinary least squares (OLS) regressions; standardised regression coefficients, p-values (probability) and r-square (coefficient of determination). Bold: $p < .01$; italics: $p < 0.5$. Reference categories in parentheses.

Source: EQLS, 2003

Secondly, different value orientations contribute to different meanings of a job. For example, it is very likely that, in the poorer countries, the meaning of a job is much more related to earning money than to self-realisation. Based on this line of reasoning, it could also be expected that intrinsic rewards, such as an interesting job, autonomy and so forth, are more important in the Western European countries, that is, in the more affluent nations. Similarly, an interesting job and good career prospects are likely to be viewed as sources of quality of work, particularly in the EU12 High and EU7 Intermediate. Thus, as the results clearly show (Table 7), intrinsic rewards seem to contribute more to life satisfaction in the richer European countries, whereas no evidence of their influence on life satisfaction is found in the EU6 Low or ACC3.

From a country perspective, it can therefore be concluded that life satisfaction is considerably determined by job security and good pay in all parts of Europe; however, in the EU12 High and EU7 Intermediate in particular (that is, Western Europe in principle), intrinsic rewards such as having an interesting job or good autonomy at work play a stronger role. In contrast, in less affluent countries such as the EU6 Low and ACC3, or Eastern Europe in general, extrinsic rewards dominate other work related criteria in determining life satisfaction. Hence, having a good salary is more important in these countries than in the wealthier nations, while having an interesting job is not statistically significant. In other words, intrinsic rewards do not play a role in determining life satisfaction in the EU6 Low or ACC3 regions.

Nevertheless, it is important to note that the proportion of overall variance explained by the model is quite low. In particular, the results of the regression analyses indicate that just over 10% of all observed variation in life satisfaction can be attributed to working conditions. Furthermore, although significant, most of the coefficients are small in size. Thus, these findings suggest that both the employment situation and attitudes towards work only marginally contribute to explaining differences in life satisfaction. This conclusion is also commensurate with other studies (Near, 1984; Rode and Near, 2005). Such findings are rather surprising, since it would be expected that stress at work, long working hours and unhealthy conditions lower life satisfaction, although the theories of 'spill over' and 'needs hierarchy' would suggest that it is the specific domains which dominate attitudes, unless there is 'spill over'. To what extent, however, does this scenario apply when their influence on overall job or work satisfaction is considered? As argued earlier, because previous studies have shown that overall job satisfaction has a strong effect on life satisfaction, and as conditions of work might be expected to have a strong effect on job satisfaction, it is not unreasonable to assume that the relationship between working conditions and life satisfaction is, in fact, mediated by job satisfaction. It is to this issue that the analysis will turn next.

First, the direct impact of work characteristics on job satisfaction is analysed. Next, the study examines the indirect effects of these working conditions on life satisfaction, as mediated by job satisfaction. However, it is important to note that although some of the work indicators and job satisfaction could share considerable similarities in meaning, they are not merely measuring the same thing. In fact, as argued earlier, not only do many of the work indicators not focus on job satisfaction at all but on the actual employment conditions, but even when the subjective measures are considered, the chosen indicators simply reflect perceptions of job characteristics without the necessary evaluation in terms of satisfaction. Thus, for the purposes of these analyses, job satisfaction is examined as an outcome of various experiences with the work situation itself. In line with this 'bottom up' approach, being satisfied with one's present job is thus considered the result of an evaluation of working conditions.

Impact of working conditions on job satisfaction

The results presented in this section (Table 8) show the average levels of job satisfaction according to employment setting and respondents' perceptions of the job. These results represent the direct influence of the illustrated aspects of quality of work on job satisfaction. At first glance, it can be seen that levels of job satisfaction generally vary much more according to the different aspects of working conditions than is the case with life satisfaction (see Table 6). Thus, at least as far as these European regions are concerned, working conditions impact primarily on job satisfaction as the relative domain of satisfaction. However, the gap between richer and poorer countries in relation to job satisfaction

is much narrower than is the case with life satisfaction. For example, a comparison between the Western and Eastern European groups of countries shows that the same levels of job satisfaction are found in many cases. Generally, the impact of working conditions on job satisfaction is nearly the same across Europe. Furthermore, both employment setting and perceptions of working conditions play an important role in determining levels of job satisfaction across Europe. In fact, whereas perceptions of working conditions and, in particular, employment setting only marginally contribute to life satisfaction, their influence is much greater on job satisfaction.

Employment setting

In terms of occupational status, professionals and self-employed people enjoy higher levels of job satisfaction, while both skilled and unskilled manual workers report lower job satisfaction levels (Table 8). Interestingly, professionals experience the same levels of job satisfaction regardless of which country they live in. This is not the case in relation to other occupations. Substantial variations in levels of job satisfaction were found among self-employed workers, particularly farmers. In the ACC3, job satisfaction levels among farmers were particularly low at an average level of 4.4 (on a 10-point scale), compared with an average satisfaction level of 7.0 among farmers in the EU25. This may be partly due to the fact that, for many of these people, farming represents an alternative to unemployment rather than being a chosen vocation; thus, it acts as a type of social safety net for people who are less well-off (Wallace and Latcheva, 2006). Greater differences in terms of this kind of stratification were found in both Eastern Europe and the ACC3 than in Western Europe (mainly the EU15).

Working hours perpetuate the same type of trends. The main differences can be found between regions, rather than within regions. Only in the ACC3 does job satisfaction vary considerably according to the number of hours worked. In this group of countries, people who work long hours – and previous findings have shown that a very large proportion of workers do so – are considerably less satisfied with their jobs than their counterparts are in all of the other country clusters. Nevertheless, although these people report an average level of job satisfaction of 6.5, this is still higher than the job satisfaction levels reported by part-time workers in Bulgaria, Romania and Turkey, at 6.3. This confirms the finding that part-time work does not represent the preferred option for people in Eastern Europe, even as a way of balancing work and family life. Instead, people in the poorer countries are more likely to be dissatisfied than satisfied if they find themselves engaged in this kind of work because it means a lower income.

The type of work contract influences job satisfaction to a greater degree. People working on unlimited or long-term contracts are far more satisfied with their jobs than those on any other kind of work contract. This is especially true in the case of the ACC3 and Eastern European countries. Interestingly, in Western Europe, the variation in job satisfaction levels between those on short-term contracts and workers on long-term contracts is not notably wide. Thus, the type of work contract does not substantially contribute to job satisfaction in the more affluent European countries. In Eastern Europe, the opposite is the case, particularly among people on short-term contracts, who report much lower levels of job satisfaction. In the EU6 Low, this discrepancy between those on short-term contracts and those on long-term contracts amounts to 1.1 points of a difference on the 10-point job satisfaction scale.

Table 8 Impact of working conditions on job satisfaction, by country cluster

Working conditions	Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Employment setting							
Occupation							
Professional, managerial	8.0	7.9	8.0	7.6	7.8	7.9	7.9
Other non-manual professional	7.3	7.2	7.4	7.0	7.2	7.0	7.3
Self-employed	7.9	7.3	8.0	7.5	7.1	6.8	7.8
Skilled worker	7.0	6.5	7.0	6.7	6.4	6.3	6.8
Non-skilled worker	6.6	5.5	6.6	6.2	5.6	4.8	6.4
Farmer	7.5	6.3	7.6	6.5	6.3	4.4	7.0
Working hours							
Less than 30 hours a week	7.3	7.3	7.4	7.2	7.2	6.3	7.3
Between 30 and 40 hours a week	7.3	7.0	7.4	7.0	6.8	7.0	7.2
More than 40 hours a week	7.7	6.9	7.7	7.0	6.8	6.5	7.4
Contract							
Unlimited	7.5	7.0	7.5	7.1	6.9	7.4	7.4
Long-term	7.1	7.3	7.1	6.9	7.2	7.6	7.2
Short-term	6.8	6.3	6.8	6.8	6.1	6.6	6.7
Supervisory responsibilities							
Yes	7.9	7.6	7.9	7.4	7.5	7.1	7.8
No	7.2	6.7	7.2	6.9	6.6	6.4	7.1
Second job							
Yes	7.5	7.2	7.6	7.0	7.1	7.0	7.4
No	7.4	6.9	7.5	7.0	6.8	6.6	7.3
Perceptions of working conditions							
Danger of job loss							
High	6.3	5.8	6.3	5.7	5.5	5.4	6.0
Neither high nor low	6.7	6.7	6.7	6.6	6.6	6.8	6.7
Low	7.7	7.4	7.7	7.4	7.3	7.2	7.6
Job too demanding							
Yes	7.3	6.8	7.4	6.9	6.7	6.3	7.2
Neither/nor	7.3	7.0	7.3	7.0	6.8	7.3	7.2
No	7.7	7.2	7.7	7.3	7.1	7.4	7.6
Well paid							
Yes	8.0	8.1	8.1	7.7	8.2	8.5	8.0
Neither/nor	7.4	7.4	7.4	7.2	7.3	7.2	7.4
No	6.6	6.1	6.7	6.3	6.1	5.4	6.5
Autonomy							
Yes	7.8	7.3	7.9	7.4	7.2	7.0	7.7
Neither/nor	7.0	7.0	7.1	6.9	6.9	6.8	7.0
No	6.5	6.2	6.6	6.3	6.1	6.0	6.4
Boring							
Yes	5.5	5.6	5.5	5.6	5.5	5.5	5.5
Neither/nor	6.7	6.4	6.7	6.4	6.3	6.2	6.6
No	7.8	7.4	7.9	7.5	7.4	7.5	7.7
Career prospects							
Yes	8.0	8.0	8.1	7.8	7.9	7.7	8.0
Neither/nor	7.6	7.3	7.6	7.2	7.2	7.4	7.5
No	6.8	6.2	6.8	6.2	6.1	5.7	6.6
Tight deadlines							
Yes	7.4	6.8	7.5	7.0	6.8	6.3	7.3
Neither/nor	7.3	7.0	7.4	6.8	7.0	6.5	7.2
No	7.5	7.0	7.5	7.2	6.8	7.1	7.4
Dangerous/unhealthy conditions							
Yes	7.0	6.3	7.0	6.4	6.3	5.6	6.7
Neither/nor	7.1	6.9	7.1	6.8	6.9	6.7	7.0
No	7.6	7.2	7.6	7.2	7.1	7.1	7.5

Notes: Results show average levels of job satisfaction. Q.41b: Could you please tell me on a scale of one to 10 how satisfied you are with each of the following aspects, where one means that you are very dissatisfied and 10 means you are very satisfied: your present job?

Source: EQLS, 2003

Supervisory responsibilities help to increase job satisfaction levels across all country groups. At the same time, people with second jobs are slightly more satisfied in Eastern Europe and in the ACC3; this could be attributed to the fact that having a second job enables these people to improve their incomes. The latter indicator, however, contributes only very marginally to job satisfaction levels, compared with the other indicators of employment setting.

Perceptions of working conditions

In relation to job insecurity, high levels of a perceived likelihood of losing one's job play a significant role in determining job satisfaction (Table 8). This perceived likelihood particularly lowers job satisfaction levels in the eastern and southern European regions. The importance of job security for overall life satisfaction has already been mentioned. The findings presented here also confirm that job security is a major determinant of job satisfaction, with the differences in job satisfaction levels between those with secure jobs and those who perceive a high risk of losing their job proving to be quite large. This finding is evident across all the country clusters, although at different levels. In the EU25, the average score among people citing job insecurity amounts to 6.0 on the 10-point job satisfaction scale. In contrast, a considerably higher score of 7.6 is observed among those who perceive their jobs to be secure, thus constituting a difference of 1.6 points in this instance. This difference in job satisfaction levels is greatest in the poorer countries. In the EU6 Low and ACC3, it amounts to a difference of 1.8 points on the 10-point scale.

Work that is perceived as being too demanding, as well as being physically dangerous or unhealthy, negatively impacts on job satisfaction levels, but to a much lesser extent compared with extrinsic and intrinsic rewards. Stress and health-related issues in the workplace have a considerably greater impact on job satisfaction in Eastern Europe than in Western Europe. Once again, however, these indicators have little impact on people's overall levels of satisfaction, and are neither strongly related to life satisfaction nor to job satisfaction.

Being well paid, having autonomy at work, not having a boring job and having good career prospects all increase job satisfaction. In fact, the perception of intrinsic and extrinsic rewards is crucial in the assessment of job satisfaction throughout Europe. Several findings are important to note in this context. Firstly, the impact of extrinsic rewards on job satisfaction is more important in the less well-off countries. For example, in Eastern Europe, the difference in job satisfaction levels between those who perceive themselves as being well paid (8.1) and those who consider that they are badly paid (6.1) amounts to 2.0 on the 10-point job satisfaction scale. In Western Europe, being well paid is of less importance and amounts to a variation in job satisfaction levels of 1.4 points. The difference in job satisfaction levels due to perceptions of payment is largest in the ACC3, amounting to a variation of 3.1 points on the 10-point job satisfaction scale. Interestingly, the small proportion of people in Eastern Europe who perceive themselves as being well paid show similar levels of job satisfaction to those in Western Europe who also consider themselves to be well paid. In fact, the highest level of job satisfaction related to perceptions of being well paid is observed in the ACC3, amounting to a value of 8.5, which indicates a very high level of job satisfaction. However, as shown earlier, the percentage of people who are actually well paid in these countries is rather low.

Good career opportunities also contribute more to job satisfaction in the eastern and less prosperous European countries. Intrinsic rewards appear to play a more important role in Western Europe. This is particularly the case in relation to the indicator of having a boring job, which lowers job satisfaction

much more considerably in the EU12 High and in Western Europe as a whole, compared with Eastern Europe.

The overall findings are therefore as expected: people who perceive their work as being both intrinsically and extrinsically rewarding have higher levels of job satisfaction than those who do not. Moreover, extrinsic rewards contribute more to job satisfaction in Eastern Europe than in the west, whereas intrinsic rewards positively influence job satisfaction in Western Europe to a larger extent.

To what extent do these relationships remain, however, when a range of background factors, such as sex, age and education, are included in the analysis? For example, do perceptions of work continue to be of greater importance than more objective criteria, such as occupation, working hours and supervisory responsibilities, in determining job satisfaction across Europe? Furthermore, which of the perceptions of work are more important in determining job satisfaction? Finally, given the substantial variation in job satisfaction across these various measures, are these reported differences in perceptions of rewards, stress and even employment setting more closely related to job satisfaction than to life satisfaction? It is to these questions that the analysis will turn next. Using a series of multiple regression analyses, the impact of the various indicators on job satisfaction across European regions is examined, controlling for a series of socio-demographic background factors such as sex, age and education.

Assessing significance of working conditions for job satisfaction

Table 9 shows the findings for the multivariate regression analysis; the bold and italic figures indicate the statistical significance and relative importance of the chosen predictors. The results suggest that the employment setting, including factors such as occupation, working hours, type of contract, supervisory responsibilities and having a second job, only plays a minor role in explaining job satisfaction. Approximately 2% of the variation in job satisfaction is due to these criteria. However, subjective perceptions of working conditions, such as feelings of job security, payment, career prospects, stress, interesting work and autonomy – that is, extrinsic and intrinsic rewards along with stress factors – impact very strongly on job satisfaction across Europe. The evidence in support of this conclusion is implicit in the significance of the indicators of rewards and stress. However, as in the previous analysis of life satisfaction, this discussion will concentrate on the most striking findings which emerged from these regressions.

The findings in Table 9 illustrate that the impact of working conditions on job satisfaction varies by country cluster. Evidently, working conditions play a crucial role in determining job satisfaction in the Western European group of countries. In particular, having an interesting job, financial rewards and career opportunities lead people to feel more satisfied with their work in these countries; negative coefficients have to be interpreted as the lack of positive perceptions, which in turn reduce the level of job satisfaction. In contrast, people who do not believe that they are well paid and who feel that they lack career opportunities report substantially lower levels of job satisfaction. The strongest influence, however, is the criterion of having an interesting job; with a coefficient of .29, this indicator impacts significantly on job satisfaction in Western Europe.

Conversely, employment setting and socio-demographic factors appear to be relatively insignificant. For example, out of all of the external factors in employment setting, only supervisory responsibilities lead to higher levels of job satisfaction in Western Europe. Nonetheless, given the small coefficient

of .04, it is inaccurate to refer to this indicator as being a major ingredient for job satisfaction, as is also the case with regard to the various socio-demographic characteristics.

Table 9 Regression analysis of impact of working conditions on job satisfaction, by country cluster

Parameters		Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Socio-demographic control variables								
Sex (male)		0.02	0.03	0.03	-0.02	0.03	0.03	0.02
Age		0.01	0.07	0.01	0.03	0.11	0.04	0.04
Education (secondary)	None	-0.05	0.00	-0.06	0.03	-0.02	-0.07	-0.02
	Primary	0.01	-0.01	0.00	0.07	-0.06	0.01	0.00
	University	-0.05	0.03	-0.03	-0.07	0.06	-0.01	-0.02
Partner (no)		0.02	0.04	0.03	-0.04	0.04	-0.01	0.01
Children (no)		-0.01	0.01	-0.02	0.03	-0.01	-0.06	0.01
Single parent (no)		0.01	0.01	0.01	0.00	0.04	-0.05	0.01
Area (rural)		-0.02	-0.02	-0.02	-0.02	-0.06	0.05	-0.03
Employment setting								
Occupation (non-manual)	Farmer	-0.01	-0.05	0.00	-0.07	-0.06	-0.18	-0.02
	Self-employed	0.00	-0.09	0.00	-0.02	-0.09	-0.17	-0.01
	Professional	0.02	0.02	0.03	0.03	0.00	0.00	0.02
	Skilled	-0.01	-0.04	0.00	-0.08	-0.05	0.01	-0.02
	Non-skilled	-0.01	-0.09	-0.01	-0.06	-0.04	-0.02	-0.03
Working hours		0.00	0.01	0.01	-0.03	0.00	0.06	0.01
Contract (unlimited)	Long-term	0.00	0.02	0.00	-0.01	0.03	0.00	0.01
	Short-term	0.00	0.00	0.00	0.02	0.02	-0.05	0.00
	Oral	0.02	-0.05	0.03	-0.04	0.00	-0.17	0.00
	Other	-0.02	-0.02	-0.02	0.00	-0.01	-0.09	-0.01
Supervisory responsibilities (no)		0.04	0.05	0.04	0.04	0.04	0.06	0.03
Second job (no)		-0.01	-0.02	-0.01	0.01	-0.03	-0.03	-0.01
Perceptions of working conditions (direction: disagree)								
Risk of losing job (high)		0.12	0.17	0.11	0.15	0.18	0.15	0.12
Psychological stress (too demanding)		0.05	0.07	0.05	0.04	0.05	0.05	0.06
Rewards (good pay)		-0.17	-0.26	-0.17	-0.19	-0.25	-0.27	-0.19
Autonomy (influence)		-0.09	-0.02	-0.10	-0.07	-0.03	-0.02	-0.07
Internal rewards (interesting)		0.29	0.18	0.29	0.23	0.18	0.11	0.26
Career (good prospects)		-0.16	-0.16	-0.16	-0.17	-0.18	-0.15	-0.17
Work intensity (tight deadlines)		0.04	0.04	0.04	0.04	0.03	0.09	0.03
Physical stress (unhealthy conditions)		0.06	0.03	0.06	0.04	0.00	0.07	0.04
N		6005	4022	4855	2448	2025	959	9465
R ²		0.33	0.33	0.33	0.31	0.33	0.38	0.32
R ² ('work' indicators)		0.31	0.28	0.31	0.30	0.26	0.29	0.30

Notes: Results of OLS regressions; standardised regression coefficients, p-values and r-square. Bold: $p < .01$; italics: $p < 0.5$. Reference categories in parentheses.

Source: EQLS, 2003

In Eastern Europe, a somewhat different picture emerges. For instance, some of the employment settings are more significant. Occupational status, in particular, seems to affect levels of job satisfaction: both self-employed and unskilled workers are less satisfied in Eastern European countries than non-manual workers are, while farmers are notably less satisfied in the ACC3 than anywhere else in Europe.

These regional differences are further substantiated by the findings for the country clusters differentiated according to GDP levels. Such a comparison reveals that the employment setting becomes more important for job satisfaction if the country's GDP levels are low. Whereas in the EU12 High, only two criteria of the employment setting are significant, the number of statistically important predictors of job satisfaction increases to four in the EU6 Low and even to six in the ACC3 countries. In the latter group of countries, farmers in particular and self-employed people experience substantially lower levels of job satisfaction than the reference group. In these three countries, people with an oral employment contract are also the least satisfied in comparison with people with unlimited contracts.

The most important predictors of job satisfaction are perceptions of working conditions. Both extrinsic rewards (job security, payment and career prospects) and intrinsic rewards (autonomy, interesting job) strongly determine job satisfaction across Europe. Whereas job security and career prospects are equally important across Europe, it is interesting, although not necessarily surprising, to observe the differences across country groups when rewards are considered. Compared with those living in Western Europe, people in Eastern Europe characterise a good job as being highly paid, whereas other more intrinsically rewarding factors such as having interesting work are of less importance. This is reflected in the increasing size of the coefficient 'being well paid' across countries. The poorer the country is, the higher in absolute size the coefficient for extrinsic rewards in the form of salaries appears to be. Moreover, the less prosperous the country is, the smaller the impact of intrinsic rewards – especially 'having an interesting job' – seems to be on job satisfaction. For example, in the EU12 High, the importance of intrinsic rewards in terms of having an interesting job is almost three times as high as it is in the ACC3. In absolute terms, a regression coefficient of 0.29 for intrinsic rewards in Western Europe implies a very strong relationship between this particular characteristic and job satisfaction. Thus, at least as far as differences across these European country clusters are concerned, the major criterion for job satisfaction in Western Europe is the intrinsic value of the work in terms of having an interesting job, whereas in Eastern Europe, the monetary value of a job seems to matter the most.

To conclude, this current analysis shows that quality of work, whether in the form of employment setting or perceived working conditions, plays a significant role in determining levels of job satisfaction. Generally, perceptions of working conditions have proven to be the most influential factors in this respect. By contrast, factors within the employment setting are of lesser importance, except in terms of occupational differences and their influence on job satisfaction. This is not the case, however, when life satisfaction is considered. In fact, as the previous analysis demonstrated, both employment setting and subjective perceptions of working conditions contribute only marginally to life satisfaction, although the latter appear to be far more influential in this respect. Hence, it is reasonable to conclude that the impact of job characteristics on life satisfaction may be mainly indirect, namely through job satisfaction.

To investigate this assumption, the next part of the analysis proceeds in two stages. Firstly, coefficients of determination (R-squared) are used to present the proportion of variance found in relation to life satisfaction when the effects of working conditions are included in the regression analyses. This may be interpreted as an estimation of the direct effects of working conditions on life satisfaction, not controlling for any other variables in the model besides socio-demographic background, or the control variables. Secondly, the explanatory power of the model is described,

when job satisfaction is included as an additional predictor of life satisfaction. In this instance, job satisfaction may be understood as an intervening variable. Comparing the two models can also give an insight into the direct and indirect effects of working conditions on life satisfaction. In other words, the purpose of this analysis is to investigate the degree to which job satisfaction alone explains the influence of quality of work on subjective life satisfaction, or if working conditions continue to have an independent effect or explanatory power over and above the influence of job satisfaction,

If a major change in the explanatory power of the model is observed between the two stages of the analysis, evidence should be found supporting the argument of the strong indirect effects of working conditions through job satisfaction and only weak (remaining) direct effects. For example, if the inclusion of job satisfaction changes these patterns, it would indicate that working conditions have a mainly indirect impact on life satisfaction by heavily determining job satisfaction, which in turn impacts positively on life satisfaction. In contrast, if the explanatory power of the model remains equally strong after having included (controlling for) job satisfaction in the various regression models, it could be concluded that working conditions are not moderated determinants of life satisfaction, but influence the latter directly.

Relationship between working conditions, job satisfaction and life satisfaction

The purpose of this section is to explain the relationship between working conditions, job satisfaction and life satisfaction. As explained previously, a crucial aim of this part of the analysis is to investigate to what extent the impact of working conditions on life satisfaction may be explained by working conditions alone or to what degree it may be attributed to the indirect influence of working conditions as mediated by the influence of job satisfaction. To undertake this investigation, ordinary least squares (OLS) regression analysis was used to predict life satisfaction in two stages: firstly, by only including working conditions to assess the direct effects; secondly, by including working conditions and job satisfaction to assess the remaining direct effects and the moderated (indirect effects) of working conditions through job satisfaction on life satisfaction. More specifically, with the help of coefficients of determination – R-squares or the proportion of variance explained – it is possible to highlight the way in which working conditions impact both directly and indirectly on life satisfaction across the European country clusters.

Given the results of the previous analyses, it is reasonable to expect that working conditions would have a larger impact on job satisfaction than on life satisfaction, because they are more closely related to work than to life in general. In other words, it is possible to assume that most of the causal interpretation of the associations is due to the strong associations between working conditions and job satisfaction. Direct effects between job characteristics and the overall measure of subjective well-being do not seem as likely, since much of the relationship should be mediated by the specific domain satisfaction.

The results presented in Table 10 should be interpreted as follows: Model 1 and Model 2 represent the findings for the proportion of explained variance in life satisfaction. Model 1 includes all of the indicators of working conditions, without job satisfaction. Hence, it models the direct effects of working conditions on life satisfaction as a first step. Model 2 includes job satisfaction as an additional predictor of the overall level of life satisfaction. Adding the strong intervening covariate of job satisfaction to the model yields a path model approach, which traces the direct and indirect

effects of working conditions on life satisfaction. Hence, this model assumes direct and indirect links between working conditions, on the one hand, and life satisfaction, on the other. As explained previously, by comparing the differences between Model 1 and Model 2 in the proportion of variance explained, it is possible to make an inference about the indirect effects of working conditions on life satisfaction. In other words, if the coefficients of determinations vary strongly for working conditions between the two models, this is proof of an indirect relationship.

Table 10 Direct and indirect effects of working conditions on life satisfaction through job satisfaction, by country cluster

Models	Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Model 1 (direct effects only)							
Working conditions	0.12	0.11	0.13	0.11	0.10	0.11	0.14
Model 2 (direct and indirect effects)							
Working conditions	0.03	0.03	0.03	0.02	0.04	0.02	0.04
Job satisfaction	0.18	0.14	0.18	0.18	0.11	0.17	0.17
Regression coefficient (standardised, direct effect)							
Job satisfaction	0.35	0.30	0.35	0.35	0.26	0.36	0.33

Note: Explanatory power (R-square) of blocks of variables and OLS regression slopes for job satisfaction.

Source: EQLS, 2003

The results in Table 10 confirm the expectation of the mainly indirect effects of working conditions on life satisfaction, as mediated by job satisfaction. Although working conditions account for between 12% and 14% of the variation in life satisfaction if their influences are measured directly (Model 1), when job satisfaction is included in the regression equations, the explanatory power of the model that can be attributed to working conditions decreases dramatically across all of Europe (Model 2). For example, R-squares of working conditions decrease from 11% to 2% in the EU7 Intermediate and reach their maximum at just 4% in the poorer countries of the EU. Hence, the explanatory power, and thus the contribution of these criteria in explaining life satisfaction, diminishes almost completely once job satisfaction has been added to the regression model. This signals strong indirect effects, as the given correlations of the direct model are compensated for by the variable job satisfaction, which itself explains a large proportion of the variation in life satisfaction across Europe. For example, R-squares for job satisfaction account for either 17% or 18% of the variation in life satisfaction across the vast majority of these European regions (see Model 2).

Table 10 also lists the size of the regression coefficients of job satisfaction on life satisfaction. As expected, and in line with the reported coefficients of determination, it can be seen clearly that job satisfaction impacts strongly on life satisfaction across Europe. Standardised regression coefficients show that, with a change of one standard deviation in job satisfaction, the level of life satisfaction goes up about 0.26 standard deviations in the EU6 Low and 0.36 in the ACC3.

By compensating the effects of working conditions on life satisfaction, job satisfaction demonstrates a very powerful influence on life satisfaction. Once again, this opens up the debate about the relationship between working conditions and job satisfaction in the EQLS. For example, as discussed earlier, it could be argued that working conditions act merely as a complementary measure of job satisfaction. The finding that the relationship between working conditions and life satisfaction is so

strongly mediated by job satisfaction lends some support to this idea. However, this argument does not stand up to closer examination. As mentioned, the EQLS assesses both dimensions in several ways. The assessment of working conditions includes the respondents' perceptions of work in general but does not measure satisfaction with specific characteristics of the job. Secondly, the bivariate associations between life satisfaction and working conditions, on the one hand, and between life satisfaction and job satisfaction, on the other, are contrary. Job satisfaction correlates strongly with life satisfaction; working conditions, on the whole, do not. Bivariate correlations with single job characteristics such as rewards or stress are even lower. If it was the case that the measurement of job satisfaction and of working conditions were the same thing, the correlations with third variables – that is, life satisfaction – should be more or less the same. However, this does not appear to be the case here. Thus, there is sufficient distinction between the two measures to operationalise working conditions as determinants of job and life satisfaction. The fact that job satisfaction mediates most of the relationship is evidence of the indirect effects of working conditions on life satisfaction.

Conclusions

To summarise, the results of this part of the analysis clearly show that the explanatory power of the set of indicators for working conditions decreases substantially if job satisfaction is included in the model. In most of the countries, the working conditions outlined account for 4% or even less of additional variation in life satisfaction, once job satisfaction is included in the regression models. Furthermore, the number of significant effects of more detailed working conditions decreases, as does the size of those effects in general, when job satisfaction is included in the regression models. Remaining influences are different at national level. Most common is the direct effect of adequate payment and perceived job security, which also bypass the measure of job satisfaction.

These results clearly show the strong inter-correlations between quality of work and life satisfaction according to the measurement taken in the EQLS. It is not surprising, therefore, that criteria such as working conditions and job satisfaction are more closely related to each other than to an overall measure of quality of life. Most of those interrelations can be modelled in this indirect way. Only a few aspects that also have direct effects on quality of life remain after having controlled for the unique impact of job satisfaction. Hence, the impact of working conditions on life satisfaction can be best described as being mediated by the domain satisfaction concerning one's present job.

This leads to an important conclusion: working conditions influence job satisfaction, which in turn influences life satisfaction. Hence, in order to increase life satisfaction, policymakers also need to concentrate on people's current levels of job satisfaction. In order to be satisfied with their jobs, Western Europeans place a greater emphasis on interesting jobs, whereas Eastern Europeans mention a good salary as the main criterion for being satisfied with the job. Moreover, satisfaction with work seems to increase if people feel more secure in their jobs.

Following on from these conclusions regarding the relationship between working conditions and job and life satisfaction, the report will next turn to the second major issue – namely, the influence of work–life balance on subjective well-being. The analysis of work–life balance follows the same approach as the previous investigation into the relationship between working conditions, job satisfaction and life satisfaction. More specifically, it will first look at the direct effects of work–life balance on subjective life satisfaction and, subsequently, at its possible indirect effect as mediated by job satisfaction. As discussed previously, two sets of questions are used for assessing work–life

balance. Firstly, work pressures are considered in terms of whether respondents are too tired from their job to adequately participate in family life, whether they experience a clash of responsibilities between work and family, and whether family life impinges on their work. Secondly, time pressures are considered in terms of whether respondents feel that they spend too much time on the job, and whether they spend too little time with family or social contacts.

Impact of work–life balance on job and life satisfaction

As noted at the beginning of this report, the relationship between quality of work and life satisfaction could arguably also be influenced by the degree to which people are able to combine work and other important life domains, such as social life and family life. Thus, a good work–life balance might lead to higher levels of life satisfaction in general. However, work–life balance could also influence job satisfaction. It is likely that jobs which facilitate a more favourable combination of people’s work and personal lives could lead to higher satisfaction levels than jobs which pose a challenge to people’s work–life balance. Thus, jobs that prevent people from participating in family and social life are likely to be associated with lower levels of job satisfaction.

Using similar steps to those applied in the earlier analysis of working conditions, this chapter explores the relationship between work–life balance and life and job satisfaction in three stages. OLS multivariate regression analyses are used throughout the investigation, first to assess the importance of work–life balance for life satisfaction, then to investigate the relationship between job satisfaction and work–life balance. Finally, building on the previous analyses, the direct and indirect effects of work–life balance on life satisfaction are explored. However, to provide as comprehensive an account as possible, the analysis also looks at the direct and indirect effects of working conditions. The inclusion of both factors – working conditions and work–life balance – allows the analysis to isolate the relative strength of the direct and indirect effects of working conditions and work–life balance on life satisfaction, as moderated by job satisfaction. As in the previous investigations, all regression models control for a range of socio-demographic or background characteristics, such as the impact of sex, age, education, family situation, and urban or rural location.

Relationship between work–life balance and life satisfaction

Overall, the results suggest that, although work and time pressures do tend to lower life satisfaction, the explanatory power of the model across Europe is very low, accounting for only 5% of the variance (Table 11). Furthermore, there is some evidence to suggest that national patterns are an important factor in determining the relationship between work–life balance and life satisfaction. In other words, although some common trends were observed, people in Europe generally differ in the way they achieve life satisfaction with respect to work–life balance.

In relation to the specific effects of different aspects of work–life balance, it was found that, in most of the European countries, the sense that family obligations impinge on concentration at work has a negative effect on life satisfaction. Being too tired from the job to fulfil household obligations also decreases life satisfaction in many countries. Differences between Western and Eastern Europe were not large in this context. However, in terms of countries differentiated according to GDP levels, it was found that the poorer the country is, the less impact an unbalanced life has on levels of life satisfaction, as was reflected by the lower number of significant coefficients in the EU6 Low and ACC3.

Impact of work and time pressures

Looking at the measures of work pressures, evidence of significant effects emerged in many of the European country clusters. Generally, it is possible to deduce that the higher the level of work pressure, the lower the level of life satisfaction. It is not easy to clearly rank the measures of work

pressures in terms of their importance with regard to life satisfaction. Nevertheless, it appears that, in the less affluent regions of Europe (EU7 Intermediate, EU6 Low and ACC3), work and time pressures are not as influential for life satisfaction as they are in the wealthier nations (EU12 High).

With respect to time pressures, spending too much time on the job does not seem to threaten life satisfaction to any great extent, since in most regions, this indicator appears to have no effect whatsoever. Time pressures impinging on family life play a role in some regions. In the less prosperous Member States (EU7 Intermediate, EU6 Low), people who report that they spend too little time with their families cite lower levels of life satisfaction. This is not the case, however, in the EU12 High and ACC3.

The feeling of spending too little time with social contacts also impacts negatively on life satisfaction in many European regions. At cluster level, it was found that the perception of having too little time for social contacts is significant in every country cluster, with the exception of the ACC3. Compared with other time pressures, not having enough time to meet with friends is the most striking contributor to low levels of life satisfaction.

Table 11 Effects of work–life balance on life satisfaction, by country cluster

Parameters	Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25	
Socio-demographic control variables								
Sex (male)	0.01	0.01	0.02	-0.02	0.01	0.05	0.03	
Age	-0.06	-0.11	-0.05	-0.13	-0.13	-0.02	-0.05	
Education (secondary)								
	None	-0.07	-0.01	-0.09	0.05	0.00	-0.05	-0.03
	Primary	0.01	-0.05	-0.02	-0.02	-0.08	-0.09	-0.03
	University	0.07	0.14	0.08	0.07	0.21	0.04	0.08
Partner (no)	0.15	0.12	0.16	0.08	0.13	0.07	0.13	
Children (no)	0.00	-0.02	-0.01	0.02	0.06	-0.06	-0.01	
Single parent (no)	0.01	-0.02	0.02	-0.04	-0.02	-0.05	0.00	
Area (rural)	0.01	0.01	0.01	0.05	0.01	0.06	0.02	
Perceptions of work–life balance								
Work pressures:								
Too tired from job	-0.05	-0.04	-0.07	-0.01	-0.03	0.02	-0.06	
Clash of responsibilities	-0.08	-0.09	-0.07	-0.10	-0.12	0.02	-0.09	
Family impinges on job	-0.10	-0.05	-0.10	-0.04	-0.03	-0.14	-0.09	
Time pressures:								
Too much time on job	0.02	-0.02	0.02	-0.01	-0.01	0.08	0.00	
Too little time for family	-0.01	-0.03	0.00	-0.06	-0.08	-0.03	-0.01	
Too little time for social contacts	-0.09	-0.11	-0.10	-0.06	-0.07	-0.05	-0.10	
N	6234	4165	5013	2622	2085	978	9848	
R ²	0.07	0.08	0.08	0.06	0.12	0.07	0.08	
R ² (work–life balance)	0.05	0.03	0.05	0.03	0.04	0.02	0.05	

Notes: Results of OLS regressions; standardised regression coefficients, P-values and R-square. Bold: p<.01; italics: p<.05.

Source: EQLS, 2003

Overall therefore, no consistent picture emerged with regard to the effects of work–life balance on life satisfaction across Europe, although the effect is generally rather weak. National patterns seem to determine the relationship between work–life balance and life satisfaction to a large extent, with

different regions showing different results. Nonetheless, in an attempt to observe some common trends, evaluating the size of effects at cluster level can tell a different story. Evidently, European people differ in the way in which they achieve life satisfaction with respect to work–life balance. The national variations can also reflect different policy measures: for example, the impact of a package of work–life balance measures in the Netherlands since the 1980s seems to have had a positive effect (Jager et al, 2004). On the other hand, the neglect of such policies in the NMS and ACC3, as well as the withdrawal of childcare support in many of these countries since their economic transition, has led to people’s discontent with work–life balance (Wallace, 2003a). The differences in the assessment of work–life balance also reflect variations in the combinations of work and care in different households; here, a variety of different patterns are evident across Europe, reflecting both policies as well as cultures and values (Haas et al, 2006).

To what extent, however, do similar patterns emerge when the relationship between work–life balance and job satisfaction is considered? In other words, are the effects of work–life balance on job satisfaction also only weakly related across the European regions? Furthermore, do important regional variations arise in relation to this issue? It is to this issue that the analysis now turns.

Table 12 Effects of work–life balance on job satisfaction, by country cluster

Parameters	Western Europe	Eastern Europe	High EU12	EU7 Intermediate	EU6 Low	ACC3	EU25
Socio-demographic control variables							
Sex (male)	0.01	0.02	0.01	-0.03	0.04	0.02	0.02
Age	0.03	0.01	0.02	-0.03	0.03	0.03	0.04
Education (secondary)							
None	-0.06	0.00	-0.07	0.05	-0.02	-0.05	-0.02
Primary	-0.06	-0.05	-0.07	-0.02	-0.11	-0.15	-0.07
University	0.08	0.17	0.09	0.06	0.19	0.03	0.10
Partner (no)	0.05	0.09	0.07	-0.05	0.13	0.02	0.04
Children (no)	0.03	0.00	0.00	0.12	-0.02	-0.09	0.02
Single parent (no)	0.03	0.02	0.04	-0.02	0.04	-0.07	0.02
Area (rural)	-0.03	0.00	-0.02	-0.01	-0.01	0.08	-0.02
Perceptions of work–life balance							
Work pressures:							
Too tired from job	-0.06	-0.07	-0.07	-0.04	-0.06	0.00	-0.07
Clash of responsibilities	0.03	-0.08	0.04	-0.04	-0.09	-0.02	-0.01
Family impinges on job	-0.15	-0.03	-0.16	-0.08	0.00	-0.21	-0.11
Time pressures:							
Too much time on job	-0.11	-0.01	-0.10	-0.07	-0.02	-0.13	-0.08
Too little time for family	-0.05	-0.03	-0.06	-0.03	-0.05	-0.04	-0.04
Too little time for social contacts	-0.03	-0.07	-0.04	-0.08	-0.06	-0.01	-0.05
N	6251	4187	5029	2624	2104	973	9888
R ²	0.07	0.07	0.08	0.06	0.10	0.17	0.07
R ² (work–life balance)	0.06	0.03	0.06	0.04	0.03	0.08	0.05

Notes: Results of OLS regressions; standardised regression coefficients, P-values and R-square. Bold: p<.01; italics: p<.05.

Source: EQLS, 2003

Relationship between work–life balance and job satisfaction

The results in Table 12 represent the findings of the OLS regressions on job satisfaction. Overall, the results suggest that, although work and time pressures do tend to lower job satisfaction, the explanatory power of the model across Europe is once again very low. Work–life balance issues

account for just 6% of the variance in Western Europe and only 3% of the variance in Eastern Europe. Although the explanatory contribution of work–life balance to job satisfaction is highest in the ACC3, at just 8%, it still does not contribute considerably to differences in levels of job satisfaction.

In terms of the specific effects of work–life balance on job satisfaction, the results provide some, albeit limited, support for the view that a lack of balance between working and non-working life causes a decrease in job satisfaction. In other words, work and time pressures impact negatively on job satisfaction. Family responsibilities impinging on work have the strongest impact on job satisfaction in this respect. This is particularly evident in the EU12 High, but also in the ACC3. Interestingly, this perception does not influence job satisfaction in the least prosperous EU Member States, that is in the EU6 Low.

In relation to time pressures, the perception of spending too much time on the job decreases job satisfaction mainly in Western Europe, but also in the ACC3. In Eastern Europe, time pressures barely affect job satisfaction. Only time constraints on meeting friends decrease job satisfaction in the EU6 Low.

These findings are somewhat surprising, as one would have expected work–life balance issues to have a greater impact on job satisfaction. However, the measures provided by the EQLS give no evidence of considerable associations between work–life balance and job (and life) satisfaction. In fact, compared with working conditions, work–life balance issues appear to be of little importance in predicting either job or life satisfaction.

It is to an empirical investigation of this assumption that the analysis will turn next. Once again, coefficients of determination (R-squares) are used to investigate this issue, firstly to determine the proportion of variance explained in relation to life satisfaction when the effects of both working conditions and work–life balance are included in the regression analyses. The various multiple indicators were entered in a step-by-step approach, with work–life balance included first, followed by the impact of working conditions. Adopting this step-by-step method of inclusion ensures that all of the variation that is not due to working conditions is already explained.⁶ Thus, these coefficients may be interpreted as an estimate of the separate and direct effects of both working conditions and work–life balance on life satisfaction. In the second part of this analysis, the explanatory power of the model is then outlined when job satisfaction is included as an additional predictor of life satisfaction. Comparing the two models not only makes inferences about the direct and indirect effects of both working conditions and work–life balance on life satisfaction, but also isolates their relative importance in determining this issue.

Direct and indirect effects of working conditions and work–life balance on life satisfaction

Table 13 presents the findings concerning the direct and indirect effects of both working conditions and work–life balance on life satisfaction. Similar to the earlier analysis of this issue in relation to working conditions, the findings should be interpreted as follows: Model 1 and Model 2 present the share of explained variance in life satisfaction. Model 1 includes all of the indicators of both working

⁶ No matter what order the variables are entered into the regression equation, it can be clearly observed that the effects of working conditions on job satisfaction are larger than those of work–life balance in both clusters of European countries.

conditions and work–life balance, without job satisfaction. Hence, it models the direct effects of both working conditions and work–life balance on life satisfaction. Model 2 includes job satisfaction as an additional predictor of the overall level of life satisfaction. Hence, this model assumes direct and indirect links between working conditions and work–life balance in relation to life satisfaction. As previously explained, by comparing the differences between Model 1 and Model 2, inferences can be made about the direct and indirect effects of both working conditions and work–life balance on life satisfaction; moreover, their relative importance in determining life satisfaction can be isolated.

Focusing initially on Model 1, the results clearly show that the relative strength of the effects of working conditions are larger than those of work–life balance measures in all country clusters (Table 13). Whereas working conditions explain about 10% of the variation in life satisfaction, work–life balance issues only account for about 5% or even less of the variation. In fact, this ratio amounts to about 3:1 in most of the country clusters. Thus, in determining life satisfaction, this finding indicates that the effect of working conditions is three times higher than that of work–life balance. This is particularly evident in the case of the ACC3, where the measures of work–life balance barely explain life satisfaction at all (2%).

With respect to cross-country variations, no large differences can generally be observed in relation to the explanatory powers of the two constructs – working conditions and work–life balance. In all of the country clusters concerned, the impact of working conditions is stronger than that of work–life balance. Although the proportion of explained variation is statistically significant in all cases, the (direct) relationships between these two factors – that is, working conditions and, particularly, work–life balance – and life satisfaction are rather weak.

Table 13 Direct and indirect effects of working conditions and work–life balance on life satisfaction via job satisfaction, by country cluster

Models	Western Europe	Eastern Europe	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Model 1 (direct effects)							
Working conditions	0.11	0.10	0.11	0.09	0.08	0.09	0.12
Work–life balance	0.04	0.03	0.05	0.03	0.04	0.02	0.05
Model 2 (direct and indirect effects)							
Working conditions	0.02	0.03	0.03	0.02	0.04	0.02	0.03
Work–life balance	0.02	0.02	0.02	0.01	0.02	0.00	0.02
Job satisfaction	0.18	0.13	0.18	0.17	0.10	0.16	0.18

Note: Explanatory power (R-square) of blocks of variables.

Source: EQLS, 2003

Turning now to the indirect effects of working conditions and work–life balance on life satisfaction as mediated by job satisfaction, Model 2 presents the findings for this part of the investigation (Table 13). The results show that, once job satisfaction is included as an additional predictor of life satisfaction, the direct effects of working conditions and work–life balance seem to disappear almost completely. Thus, in all of the country clusters, the total explained variation of life satisfaction is mainly due to the inclusion of job satisfaction. The additional explanatory power of the remaining direct effects of working conditions and work–life balance are minimal. In other words, the direct effects of working conditions and work–life balance do not remain after the inclusion of job satisfaction. As expected, the results in Table 13 confirm those of the earlier analysis, which showed

the predominantly indirect effects of working conditions on life satisfaction as mediated by job satisfaction. However, the same is not necessarily true when work–life balance measures are considered. As the results of this analysis clearly show, not only are the initial direct effects of work–life balance on life satisfaction quite small, but the remaining effects once job satisfaction has been controlled for are almost negligible, particularly in the poorer regions of Europe.

To conclude, the results of this analysis on work–life balance provide little evidence of a strong relationship either with life satisfaction or job satisfaction. Furthermore, in comparison with working conditions, work–life balance issues only play a very minor role in predicting satisfaction in both instances, particularly when job satisfaction is considered. Thus, contrary to earlier expectations, the extent to which people can successfully combine work with family life, along with other obligations, has little or no impact on either job or life satisfaction across the European regions under consideration. Instead, the key finding to emerge from this part of the analysis postulates that, irrespective of whether working conditions or work–life balance issues are considered, job satisfaction is a major determinant of life satisfaction.

To what extent, however, is this relationship consistent at country level? In other words, can the apparently strong impact of job satisfaction on life satisfaction, as demonstrated in the previous analyses, be found in each of the countries for which the EQLS collected data? To address this question and conclude the analysis, the following section presents a multilevel model of the impact of job satisfaction on life satisfaction across the 28 European countries covered in the EQLS.

Impact of job satisfaction on life satisfaction from national perspective

To explain briefly, multilevel models can be interpreted in a similar way to regression models; however, they have particular advantages. Firstly, they go beyond conventional regression analysis by taking different levels of data into account – that is, the nested structure of data. For example, because people are ‘nested’ in countries, the data investigated in the previous analyses include both an individual and country-level perspective where variation can potentially occur. In other words, while life and job satisfaction are individual characteristics, they not only vary from person to person but also from country to country. The rationale behind this is that members of the same group or country tend to be more similar than members of different groups. Multilevel models allow for this nested structure, in that the coefficients can take into account a number of different components of variation, or in this case, those at both the individual and country level. A second major advantage is that macro-level variables can also be incorporated in the analysis. Hence, including GDP levels was important for clustering countries according to job satisfaction and working conditions, as was the country’s unemployment rate, since those faced with high national unemployment rates might be more tolerant of poor working conditions and therefore more satisfied with their jobs.

Having found that job satisfaction is a major source of life satisfaction in European countries, and incorporating most of the effects of more specific working conditions, it is appropriate to now consider the extent to which these findings may be explained by individual and/or national factors. In other words, this part of the analysis investigates whether the effects of job satisfaction on life satisfaction vary substantially across countries, or whether the observed variation is merely random (Table 14). To address this question, an outline is given of the multilevel models, which deconstruct the variation into two parts: variation at the individual level (level 1), which is most similar to regression analysis, and variation at the country level (level 2).

To explain the variation at both levels, a series of predictor variables have been included, most notably job satisfaction as the key variable of interest. In addition to conventional statements about the significance of predictor variables, multilevel studies can test whether the effect of one particular variable is stable across countries or whether the same variable has different impacts. In this case, the objective is to test whether the effect of job satisfaction on life satisfaction is equally important across all countries, thus allowing for variation in the regression coefficient of job satisfaction across the higher level units (countries). If a significant variation in this slope coefficient is found, it can be argued that job satisfaction contributes differently to overall life satisfaction across Europe.

The first step in interpreting multilevel modelling is to look at the share of variation at all levels – that is, the extent to which the variation in life satisfaction is due to individual characteristics and the extent to which it is due to country-specific factors. To address this question, the findings of the so-called ‘empty model’ (Model 1) are first presented. The purpose of the latter analysis is to separate the total variation into its two separate levels, so that it can investigate to what extent the total variation in life satisfaction occurs between individuals (level 1) and also between countries (level 2). In the next step – Model 2 – predictor variables are included in order to explain the variation found in the empty model. At this point, the analysis introduces the variable job satisfaction. In addition, the effects of respondents’ socio-demographic characteristics on life satisfaction are controlled for, along with one work-related measure, namely occupation. Occupation has been included for two reasons: firstly, as the previous analysis demonstrates, occupation is the key predictor of both job satisfaction and life satisfaction out of the various employment-setting variables; secondly, and more importantly, given the nature of the data, it is impossible to model anything more than a small number of random slopes in the multilevel models. Thus, to make the multilevel model work as efficiently as possible, the analysis has opted for a single indicator of the quality of work concept, in this instance occupation, as opposed to the more objective seven indicators of working conditions. However, central to this model is an investigation of the effect of job satisfaction on overall life satisfaction at the individual level.

Model 3 investigates the extent to which the impact of job satisfaction is evident in all countries to the same degree. Thus, the focus here is on the effect of job satisfaction on life satisfaction in the 28 different countries, thereby addressing the important question of whether the impact (regression slope) of job satisfaction varies across countries. Model 3 therefore includes a random slope of job satisfaction on life satisfaction. A significant coefficient can be interpreted in the following way: it can be assumed that in countries with a higher average level of life satisfaction, the impact of job satisfaction will be different to that in countries with lower levels of subjective well-being. Finally, Model 4 includes aggregated data at the country level, to investigate whether GDP and unemployment rates also explain some of the variation in life satisfaction which is found across countries.

To assess the overall fit of these multilevel models, reference is made to the deviance statistics ($-2 \times \text{LogLikelihood}$ of the model). Although the absolute value of this figure does not make sense from a model fit perspective, the difference in deviance across nested models gives an insight into the increase or decrease in model fit while adding or subtracting additional variables. A chi-square difference test demonstrates whether the inclusion of additional variables contributes to further explaining the dependent variable, in this case life satisfaction.

**Table 14 Multilevel studies of effect of job satisfaction on life satisfaction in Europe
(Non-standardised regression coefficients)**

Predictors	Multilevel models								
	Model 1 Empty model		Model 2 Random intercept		Model 3 Random slopes		Model 4		
	Coefficients	SE (standard error)	Coefficients	SE (standard error)	Coefficients	SE (standard error)	Coefficients	SE (standard error)	
Fixed effects									
Intercept	6.762	0.018	4.846	0.165	4.861	0.189	4.851	0.139	
<i>Socio-demographic control variables</i>									
Sex (male)			0.037	0.032	0.037	0.032	0.038	0.032	
Age			-0.013	0.002	-0.013	0.002	-0.013	0.002	
Education (secondary)									
None			-0.340	0.165	-0.329	0.165	-0.328	0.164	
Primary			-0.149	0.049	-0.147	0.049	-0.145	0.049	
University			0.142	0.040	0.142	0.040	0.143	0.040	
Family									
Partner			0.442	0.039	0.442	0.039	0.442	0.039	
Children			-0.073	0.044	-0.071	0.043	-0.071	0.043	
Single parent			-0.154	0.079	-0.152	0.079	-0.153	0.079	
Area (rural)			0.006	0.032	0.003	0.032	0.006	0.032	
<i>Employment setting</i>									
<i>Occupation (professional)</i>									
Manager			0.051	0.045	0.049	0.045	0.049	0.045	
Self-employed			-0.073	0.052	-0.073	0.052	-0.073	0.052	
Skilled			-0.145	0.045	-0.144	0.045	-0.144	0.045	
Non-skilled			-0.202	0.059	-0.205	0.059	-0.207	0.059	
Farmer			0.014	0.108	0.027	0.108	0.026	0.108	
Job satisfaction			0.332	0.008	0.330	0.010	0.331	0.011	
Country-level indicators									
GDP							0.545	0.113	
Unemployment							-0.071	0.113	
Random effects (variance components)									
Level 1 (individual)									
	σ^2	3.946	0.035	2.637	0.034	2.63	0.034	2.631	0.034
Level 2 (country)									
	T^2_0	0.935	0.251	0.553	0.150	0.790	0.235	0.326	0.111
	T^2_1					0.002	0.001	0.002	0.001
	T_{01}					-0.022	0.012	-0.013	0.008
Deviance			109,589.10		45,415.57		45,404.77		45,379.86
Deviance difference			5,551.00		64,173.53		10.80		24.91
Degrees of freedom (df)			1		15		2		2
Chi-square difference test (p-value)			0.000		0.000		0.005		0.000

Notes: T^2_0 represents the variation of the intercept (average level of life satisfaction) across countries. T^2_1 represents the variation of the regression (random) slope of job satisfaction on life satisfaction across countries. T_{01} represents the co-variation between intercept and slope. Multilevel models conventionally present standard errors instead of marked p-values. Bold: $p < .05$. Country-level indicators have been standardised. Empty model's deviance difference calculated to OLS model (not shown).

Source: EQLS, 2003

Results

Models 1–4 in Table 14 show the results obtained from adding in the different variables at both national and individual level. Model 1 shows that the average level of life satisfaction in Europe is 6.8 on a 10-point scale (coefficient of the intercept). As the results at the bottom of Table 14 show, the individual-level variation in the effects of job satisfaction on life satisfaction is larger than that at country level, although both are significant.

In the next step, control variables were included in order to interpret the relationship between job satisfaction and life satisfaction across countries. Model 2 includes job satisfaction as an individual-level predictor of life satisfaction, as well as occupation and a series of socio-demographic control variables such as sex, age and education. In general, this model is able to better predict life satisfaction. In this instance, the deviance statistic drops to 45,415, which is a substantial increase in the model fit.

As explained previously, central to this model is the effect of the one-dimensional measure of job satisfaction on overall life satisfaction. Earlier findings show that job satisfaction is the most powerful predictor of life satisfaction; the multilevel model confirms this result. At the individual level, job satisfaction is extremely important in determining life satisfaction. A regression coefficient of .33 shows that with one unit change in job satisfaction, life satisfaction goes up .33 on the 10-point scale.

In terms of the other predictor variables, the findings show that whereas people's sex does not determine levels of subjective well-being, their age does, with older people having lower levels of life satisfaction. Education also plays a role in subjective well-being: the more highly educated a person is, the higher their levels of life satisfaction. Finally, the effect of the work-related predictor variable, namely occupational status, appears to be partly influential. Accordingly, skilled and non-skilled workers report substantially lower levels of subjective well-being than professional employees do. All other occupational classes do not experience differences in life satisfaction compared with non-managerial professionals. Thus, as in the earlier regression analysis, job satisfaction emerges once again as the key predictor of life satisfaction.

Model 3 addresses the question regarding the extent to which this strong positive effect of job satisfaction on life satisfaction can be observed across all countries. More specifically, this model considers whether the impact of .33 (regression coefficient from Model 2) can be found in all countries to the same extent.

Through the introduction of the variation of regression coefficients at national level, it is possible to achieve a slightly but significantly better model fit. In this instance, the deviance statistic drops to 45,404. This means that, in general, the impact of job satisfaction on life satisfaction differs across Europe. Nonetheless, although differences exist at national level, such differences are significant in only a small number of countries. As the results in Table 14 also show, the remaining variation in subjective well-being at both levels is still significant. This means that there must be other sources of variation in life satisfaction at both levels, which remain undetected so far.

One strategy for helping to partly explain the remaining variation is to include aggregated data at country level: GDP and national unemployment rates could be responsible for the variation in life/job

satisfaction across countries; therefore, Model 4 includes these aggregated data. As the results show, GDP has significant effects on life satisfaction, whereas the unemployment rate does not. The inclusion of these two country-level predictors is statistically significant as the decrease in the deviance statistics (24.91) shows, suggesting the need to cluster countries according to their GDP levels in any future analysis of subjective quality of life.

To conclude, therefore, the results of the various multilevel models indicate that life satisfaction varies considerably across countries. More importantly, the models show that job satisfaction impacts on life satisfaction in more or less the same way throughout Europe. The analysis could not detect substantial variation in the importance of job satisfaction in a statistical sense. Given this lack of random variation, it could be argued that job satisfaction is equally important for life satisfaction throughout Europe. A regression coefficient of .33 indicates that this impact is very strong.

Importance of employment for subjective well-being

Although the report has focused exclusively on the employed population, another key issue faces policymakers in Europe today – that is, unemployment. Many studies, including those of the Foundation, have shown that unemployment serves to lower life satisfaction. The aim is not to repeat such an analysis here, but rather to identify whether working conditions and work–life balance make a difference to job satisfaction and, in turn, to life satisfaction. The answer to this question has important policy implications, as it could lead to a greater emphasis on job creation alone or, alternatively, on the creation of quality jobs. At the same time, the potential impact and acceptability of these various initiatives might vary between countries, depending on their level of unemployment. For example, it is possible that people in countries with high unemployment levels, or less affluent countries, might be more inclined to take any kind of job, while people in countries with high living standards, or low unemployment levels, may be more inclined to look for quality jobs and might be more critical of poor working conditions.

For the purposes of this analysis, two indices have been devised, deriving from the accumulated experience of: a) negative perceptions of working conditions; and b) work–life imbalance. Subsequently, the analysis examines the life satisfaction levels of these people and compares them with those of unemployed people. The analysis is carried out according to country clusters defined on the basis of GDP levels – a classification which has proved to be significantly meaningful so far.

For the creation of the indices, the focus was placed on the most influential subjective perceptions of working conditions, highlighted by the regression analysis carried out earlier. Negative perceptions were added to an index including all of the following seven indicators pertaining to attitudes towards working conditions: work too demanding; low pay; no autonomy at work; dull and boring work; lack of career opportunities; tight deadlines; and dangerous or unhealthy working conditions. This index ranges from zero (no negative experiences) to seven (only negative experiences).

The index capturing work–life balance issues was constructed by adding up the responses indicating problems and difficulties in combining work and family life, namely: frequently being too tired from work to carry out household tasks; often experiencing difficulties in fulfilling family obligations because of the job; having difficulties concentrating at work because of family obligations; spending too much time on the job; and having too little time for family and other social contacts. This index ranges from zero (balanced life) to six (unbalanced life). Table 15 shows descriptive findings at the cluster level in relation to these two summary measures – perceptions of working conditions and work–life balance.

As the results in Table 15 indicate, perceptions of bad working conditions are more frequent in the poorer European countries, particularly in the NMS and in some of the southern European countries, such as Portugal or Greece. More specifically, a large gap emerges between the EU12 High and EU6 Low in relation to the average level of working conditions. In the next stage of analysis – exploring the relationship between poor working conditions and both job and life satisfaction – four of the seven negative factors regarding working conditions were used, as these represent a majority of the negative statements.

In relation to the issue of work–life balance, a less favourable situation was also observed in the poorer European countries. This index was reduced to four factors, to help isolate those with a very poor work–life balance in relation to several respects.

Table 15 Perceptions of working conditions and work–life balance, by country cluster

	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Perceptions of working conditions					
0 (no negative perceptions)	13	12	7	4	12
1	24	20	15	16	23
2	29	27	21	23	28
3	18	19	22	19	18
4	10	12	18	19	11
5	4	6	10	12	5
6	1	2	5	6	2
7 (very negative perceptions)			1	2	
Average	2.1	2.3	2.9	3.0	2.2
Work–life balance					
0 (balanced life)	23	21	17	9	22
1	23	27	20	19	23
2	22	20	18	20	21
3	15	15	24	23	16
4	10	9	13	15	10
5	6	6	6	11	6
6 (unbalanced life)	1	2	2	3	2
Average	1.9	1.9	2.2	2.6	1.9

Note: Results show cumulated negative indices, frequencies in %.

Source: EQLS, 2003

Overall, the results clearly show that the experience of both poor working conditions and/or work–life imbalance is quite widespread in Europe. The majority of each population mentions at least two severe difficulties at work and also cites problems with work–life balance. Only a small minority of respondents experience no problems at all with their work or with work–life balance. These people are more likely to live in prosperous parts of Europe, particularly in the EU15 countries and in countries with high levels of GDP.

As the results in Table 16 show, poor working conditions clearly influence levels of both job and life satisfaction across Europe. For example, jobs with the worst working conditions decrease job satisfaction by two points on a 10-point satisfaction scale in some European countries, particularly in the less affluent nations. In the ACC3, the average satisfaction levels fell by as much as 2.4 points. Moreover, the results show that work–life balance indicators do not influence either job or life satisfaction to the same extent. The differences between the satisfaction levels of those reporting the worst work–life balance problems and the remainder of those citing problems are both much smaller than is the case between those citing poor and the worst working conditions. Thus, this analysis further supports the earlier investigation, showing that work–life balance affects job satisfaction but to a lesser extent than working conditions does.

From an EU25 perspective, having a satisfying job appears to result in better life satisfaction (Figure 10). The axis representing the average level of life satisfaction across all countries is shown as 6.8

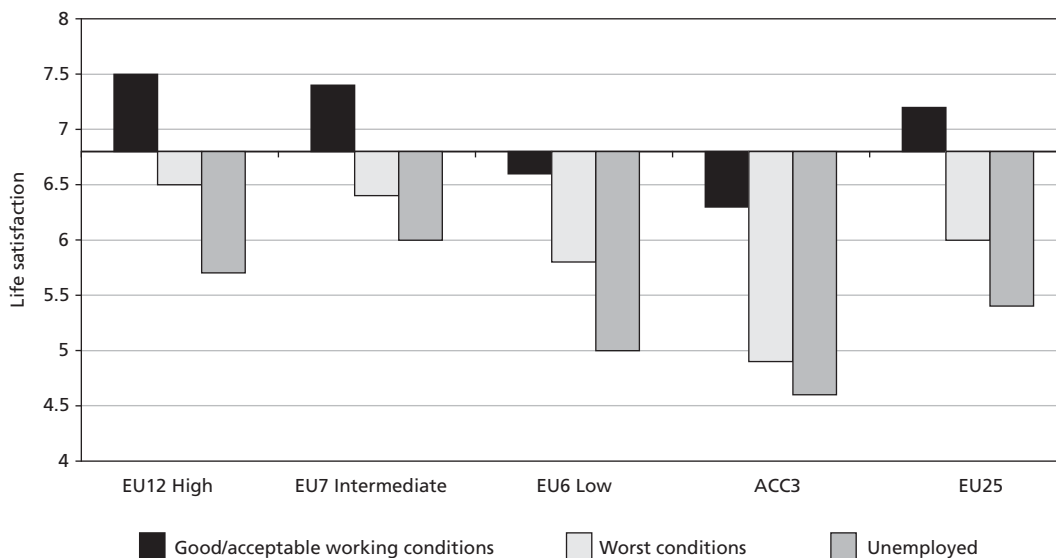
on the 10-point scale. It can be clearly seen that the worst working conditions lead to decreased levels of life satisfaction in all countries. Interestingly, in poorer European countries such as the EU6 Low or ACC3, even under favourable working conditions, people's life satisfaction levels continue to lag behind the European average.

Table 16 Average job and life satisfaction levels of people reporting poor working conditions or work–life imbalance, and life satisfaction of unemployed people, by country cluster

	EU12 High	EU7 Intermediate	EU6 Low	ACC3	EU25
Job satisfaction					
<i>Working conditions</i>					
Worst conditions	6.2	5.6	5.7	5.2	5.8
Remainder	7.7	7.4	7.4	7.6	7.6
<i>Work–life balance</i>					
Worst conditions	7.0	6.6	6.5	5.5	6.6
Remainder	7.6	7.1	6.9	7.1	7.3
Life satisfaction					
<i>Working conditions</i>					
Worst conditions	6.5	6.4	5.8	4.9	6.0
Remainder	7.5	7.4	6.6	6.3	7.2
<i>Work–life balance</i>					
Worst conditions	6.8	6.7	5.8	5.1	6.3
Remainder	7.5	7.3	6.5	6.0	7.1
Unemployed people	5.7	6.0	5.0	4.6	5.4

Source: EQLS, 2003

Figure 10 Differences in life satisfaction levels of people with good working conditions, worst working conditions and unemployed people, by country cluster



Q. 31: 'All things considered, how satisfied would you say you are with your life these days? Please tell me on a scale of one to 10, where one means very dissatisfied and 10 means very satisfied?' Average level of life satisfaction is 6.8 on 10-point scale. Source: EQLS, 2003

Bringing together these findings with those of Kapitány et al (2003), it can thus be concluded that being unemployed has a strong negative impact on life satisfaction. Furthermore, having a poor work–life balance also contributes to lower life satisfaction. While it may initially seem that providing jobs of any kind is important, job quality is also imperative. As mentioned, policymakers should therefore take into account the importance of working conditions and of finding ways to help people combine family and work life more favourably, in order to increase people’s levels of life satisfaction. Another notable result is the fact that, in the countries with the highest living standards, the differences in satisfaction levels between those who have a job and those who are unemployed are most striking. In the poorer countries, less of a difference in life satisfaction emerges between employed and unemployed people. This may be related to the low wage levels and poor working conditions of people in these countries, which may in turn minimise the differences in satisfaction levels between working and unemployed people. Nevertheless, in all countries, having better quality employment and a good work–life balance lead to higher job satisfaction levels and a higher level of life satisfaction than other kinds of working conditions do.

The main analysis considered the impact of quality of work on quality of life using findings from the EQLS survey. Quality of life was measured by the single indicator 'life satisfaction', while quality of work was measured by a series of indicators. The latter included subjectively perceived characteristics of the job, on the one hand, and employment settings such as occupational status, supervisory responsibilities, working hours and having a second job, on the other. The subjective measures of working conditions were: fear of losing one's job, the job perceived as being too demanding and stressful, dangerous or unhealthy working conditions, adequacy of pay, work autonomy, intrinsic rewards (job is not dull and boring), career prospects and work intensity. These factors broadly follow aspects of working conditions used elsewhere by the Foundation. In addition, in order to address the neglected issue of work–life balance, two additional measures were included – work and time pressure – which focused on the degree to which work competes with other aspects of life, particularly with family life. These various measures have been termed as 'quality of work'.

As part of the descriptive analysis, countries were clustered according to respondents' own views of their working conditions. Two major clusters emerged in this context: the first cluster included most of the older EU15 countries, in addition to Cyprus, Malta and Slovenia from among the NMS. These countries were grouped under the cluster 'Western Europe' and generally had more positive experiences of working conditions. The second group of countries – the Eastern Europe cluster – consisted mainly of the NMS and ACC3, along with Portugal and Greece. The latter cluster had more negative experiences of work. A distinct east–west differentiation emerged therefore, although the eastern cluster also included some of the less affluent southern European countries. In addition to this categorisation of countries, a more refined cluster analysis was also used, based on work undertaken previously by Fahey, Whelan and Maitre (2003) and by the European Commission. In this instance, the countries were clustered according to levels of GDP, to help distinguish between some of these widely varying eastern European countries. This alternative clustering of countries according to GDP levels has been used previously in other reports (Fahey et al, 2005).

As expected, significant differences emerged in relation to people's experiences in both sets of country clusters. Focusing initially on respondents' own views of their working conditions, in general, much lower levels of work satisfaction as well as life satisfaction were reported in the eastern countries than in the western nations. Moreover, in those countries, various factors served to lower satisfaction to a greater extent than in the western countries; for example, work being too demanding, lack of autonomy and tight deadlines were all more prevalent and severe in their effects. In addition, having a temporary contract and fear of losing one's job were more significant factors in reducing quality of work and life satisfaction in the Eastern Europe cluster than in Western Europe. While rewards in terms of pay were important throughout Europe, they had a greater impact on both job and life satisfaction in Eastern Europe, perhaps because 'materialist' rather than 'post-materialist' values are thought to prevail in these countries. The effects of occupational stratification were also more negative in Eastern Europe, with manual workers and, in particular, farmers suffering from lower levels of job satisfaction.

In the wealthier EU countries, the extrinsic aspects of working conditions were not as significant in determining job satisfaction. Instead, more subjective evaluations of the quality of work predominated, with factors such as not having a boring job and having good career prospects being particularly important. In contrast, in the less prosperous countries of eastern and southern Europe, more extrinsic material aspects of work held higher significance. For example, having an insecure work contract, particularly an oral contract, along with the fear of job loss, lowered job satisfaction

more considerably. While good career prospects were also important in these countries, their relevance was not as strong as in the Western Europe cluster of countries. The feeling of being well paid for one's work was important everywhere. However, financial rewards were more important in the less prosperous countries than in the richer nations.

Some aspects of working conditions were more important than others. Working hours seemed to have little direct impact, while the feeling of being well rewarded was important in all countries. In some countries, career prospects and having interesting work were significant in determining job satisfaction, particularly in the more affluent countries. This may be related to the role of post-materialist values in the more prosperous countries, or the 'hedonic treadmill', whereby once certain basic needs are satisfied, higher aspirations come into play, as has been well documented in many studies cited in this report. It also underlines the relevance across Europe of 'needs hierarchy theories' concerning the relationship between job satisfaction and life satisfaction, particularly in the context of the contrasting levels of development that can be observed in the newly enlarged, and enlarging, Europe. Thus, for people in the poorer countries, basic needs such as having an income and job security are important, whereas higher-level needs related to social and ego fulfilment come into play once these basic needs have been met (Efraty and Sirgy, 1990). This report has shown that the needs hierarchy model should be seen in a cross-national perspective.

The analysis went on to test for an estimated path model. Since it is known that working conditions have a strong influence on job satisfaction and that job satisfaction, in turn, has a considerable influence on life satisfaction, the analysis explored the extent to which working conditions had a direct influence on subjective well-being, or to what extent this was mediated by the intervening variable of job satisfaction. In practice, it was found that nearly all of the explained variance is determined by job satisfaction and that only some aspects of working conditions influence life satisfaction once this has been taken into account.

At first sight, the results were rather surprising. It is often assumed that work stress, poor physical working conditions, long hours and lack of autonomy at work lead to poor quality of life by lowering life satisfaction. However, the analysis found that such factors appeared to have only a minor effect. Instead, more positive aspects of work – good rewards, job security, favourable career prospects and interesting work – had a greater impact on life satisfaction and particularly on job satisfaction. In this respect, the results are similar to those of many studies over the years, which have demonstrated a weak or contradictory 'spill over' effect between satisfaction with lower domains, such as work, and higher domains, such as life in general (Near, 1984; Near and Rechner, 1993; Near et al, 1987; Rode and Near, 2005). In other words, people perceive their work as being separate from their life in general. This study contributes to spill over theories by showing that the relationship can be explained if job satisfaction is taken into account as an intervening variable or missing link between working conditions and life satisfaction: therefore, if people are satisfied with their work in general, they will also be more satisfied with their lives.

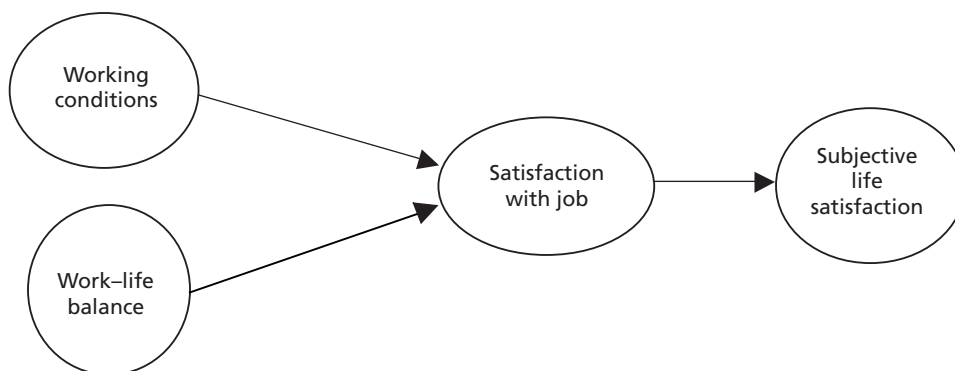
The lack of relationship between life satisfaction and working conditions could also be explained by the vague nature of the main dependent variable 'life satisfaction'. When people are asked about whether they are satisfied with their lives, a range of factors may spring to mind, such as their family relationships, housing or health. Working life is only one of many determinants of life satisfaction and not necessarily the most important. On the other hand, when asked about job satisfaction, people are more likely to think about working conditions. Hence, job satisfaction and life satisfaction should only be seen as one aspect of quality of life.

The analysis then went on to look at the issue of work–life balance. In this instance, work–life balance was measured by two sets of questions: one measuring the clash of responsibilities between family and work life, and the other measuring time pressures. In effect, it was found that work–life balance had some influence on job satisfaction, although not as much as working conditions, and not much influence on life satisfaction. Nearly all of the variance was explained by job satisfaction. However, the study also found that a poor work–life balance lowers quality of life. Again, the spill over between satisfaction in different horizontal life domains (work and family) is perhaps stronger than that between vertical life domains (work and life satisfaction).

An important finding to emerge with respect to work–life balance was in relation to the considerable level of variation across Europe. Differences in work–life balance should thus be analysed in terms of the national cultures of labour market participation and models of work and care rather than at European level. A possible recommendation for future research, therefore, is that work–life balance should be analysed separately in terms of different institutional arrangements across Europe, to determine which of these are the most successful.

Overall, the results suggest a somewhat modified path model than that which was originally proposed (see Figure 1). Figure 11 presents this revised conceptual model: here, the earlier suggested direct effects of both working conditions and work–life balance issues on subjective life satisfaction have been deleted, while the indirect effects of work–life balance issues on job satisfaction have been downgraded to a comparatively weaker influence than that of working conditions. This represents a step forward in relation to the ‘spill over’ theories described by other authors, by showing that there is in fact a relationship between life satisfaction and quality of work, once the intervening effect of job satisfaction has been taken into account.

Figure 11 Revised conceptual framework of impact of working conditions and work–life balance on job and life satisfaction



Source: EQLS, 2003

To bring the various stages of the analysis together, a multilevel model concerning the influence of job satisfaction on life satisfaction was constructed, controlling for both individual and country differences simultaneously. Once again, this model confirmed that job satisfaction was important for determining life satisfaction everywhere, despite the very different levels of life satisfaction across Europe. The multilevel model showed that the relationship between job satisfaction and life satisfaction described is, in fact, a European model: in other words, it applies to almost every country.

The model also showed that the average level of unemployment in a country does not necessarily have an impact: people are not more satisfied with their jobs and lives just because many other people are unemployed; however, people who are themselves unemployed are very dissatisfied, as was also shown. Nonetheless, GDP or the country's wealth is a significant factor and justifies the classification of European countries according to GDP levels for the purposes of this analysis.

However, the issue of GDP alone does not guarantee satisfaction with work. Once a more prosperous standard of living is achieved – as seen in the 12 wealthiest EU countries (EU12 High) – then more intrinsic aspects of job quality, such as having an interesting job and good career prospects, come into play.

Throughout the analysis, the issue of the 'satisfaction paradox' was also considered; often observed by sociologists, this paradox relates to the finding that those with the least satisfying jobs might nevertheless be content with their work for other reasons. In general, however, no evidence was found of the satisfaction paradox in this study. People in the lower occupational positions have the lowest life satisfaction and are least likely to be satisfied with their work. These contrasts were particularly evident in the Eastern Europe cluster. In the case of women, it was found that gender made very little difference to life satisfaction and to job satisfaction in this respect, except in the ACC3. Put simply, good working conditions lead to higher levels of job satisfaction, while bad working conditions lead to lower job satisfaction. Job satisfaction is lower in eastern and southern Europe, where working conditions are the least favourable. The results show that quality of working life is important not only for job satisfaction, but also because the latter, in turn, impacts on life satisfaction and therefore on quality of life in Europe.

Finally, before concluding the analysis, the relationship between quality of work, unemployment and life satisfaction was also examined – in other words, the subjective well-being of unemployed people. In order to address this question, the study considered the work–life balance of unemployed people. Accordingly, life satisfaction was found to be lowest among unemployed people. In eastern Europe in particular, poor working conditions and very low levels of reward coexist with high unemployment levels.

The European Social Policy Agenda has emphasised the importance of increasing the number of people in employment, as well as improving the quality of work. The results would suggest that these goals are important for improving life satisfaction and quality of life in general.

Policy implications

A range of policy implications can be deduced from these results. Firstly, it can be concluded that an important component of improving life satisfaction in Europe is to improve job satisfaction. In turn, job satisfaction can be increased by improving working conditions, particularly job security, levels of reward, making work more interesting, increasing career prospects, and reducing stress and dangerous or unhealthy working conditions. Of these factors, job security, the perception of being well paid, making work more interesting and good career prospects were deemed the most important. However, the results suggest the need for different policy strategies for the poorer EU countries in the east and south, compared with those required for the more affluent EU Member States. For example, basic issues of contract security need to be addressed in the eastern and southern countries, where

the lack of secure contracts, particularly in relation to oral contracts, leads to higher levels of dissatisfaction. Addressing this issue could constitute an important prerequisite for improved work morale and therefore quality of life. In these countries, the intrinsic rewards of work, such as good career prospects or having an interesting job, were overshadowed by the more immediate material problems of low pay and insecure jobs.

However, these issues can be addressed in various ways. The rapid introduction of higher wages and work regulations in line with the west German model following the reunification of Germany had serious economic consequences in eastern Germany – problems that have not been solved to this day. Low wages are also a way of attracting investment to less developed regions, which may in the long term be a better method for raising living standards.

The importance of intrinsic rewards in terms of interesting work and career prospects, particularly in Western Europe, indicates that policies of lifelong learning, training and job enrichment are important.

One aspect of the analysis showed that having a job was more likely to improve life satisfaction than having no job. This confirms the results of many studies over the years, including previous work by the Foundation. However, such findings could be further substantiated by proving that life satisfaction is lowest among unemployed people. The analysis outlined in this report would tend to support the goals of the European Social Agenda and the Lisbon Strategy, by showing that both a strategy of increasing employment and of improving quality of work are important. These should not be seen as alternative policy options, but rather as coterminous ones. However, labour market reforms aimed at improving the job security and work quality of those already in employment should also pay heed to the situation of those who are unemployed and avoid creating a divided society. This is especially important, since it is known that those who are excluded from the labour market are often socially disadvantaged in general terms, such as young people, women and ethnic minorities.

People living in the more affluent EU countries are less concerned about such basic material needs than they are about the intrinsic quality of their work. In contrast, people living in the less prosperous countries are more concerned about having a job and making ends meet. The enlargement of the EU has already increased the proportion of people for whom basic material concerns are an important priority. Further expansion of the EU to include Romania and Bulgaria on 1 January 2007 has strongly reinforced this polarisation, as will the accession of Turkey.

Work–life balance did not appear to have much of a direct or indirect influence on life satisfaction, although many people in Europe feel that they lead unbalanced lives. In particular, lack of time for social contacts was highlighted as a problem. However, it is worth noting that people in the ACC3 appear to lead very unbalanced lives; in Bulgaria, the birth rate has dropped dramatically, which could be a reflection of this imbalance. Nevertheless, there might be other reasons why work–life balance issues should be addressed, for example in order to improve the demographic situation in Europe or the participation rates of women. Many people have simply adjusted their lives to existing conditions and found strategies for coping with family and work pressures, for example by leaving the labour market or not having children. Strategies aimed at improving work–life balance should also reflect the success of policies already adopted to address this issue in countries such as the Netherlands or France. Such policies might help to explain the reason why the work–life balance of

people in the more affluent countries does not appear to strongly affect their life satisfaction; these would need to be explored on a country-by-country basis to identify which policies are the most effective.

However, the results also indicate that strong variations in work–life balance exist across Europe, which perhaps reflects the fact that existing policies in EU Member States vary. It also suggests that work–life balance policies need to take into account the different cultures of labour market participation and of work and care which are evident across Europe. In some countries, women can continue to work after they have children, while in other countries this option is much more difficult for women or they may feel that it is not the ‘right thing’ to do (Daly and Rake, 2003). The opportunities for men’s participation are presumably also varied, according to cultures of masculinity and social policies.

Quality of work is an important EU policy objective and one that is being monitored following the Lisbon agenda (European Commission, 2003). The quality of work, in this sense, includes many of the issues raised in this report: for example, intrinsic job quality is an important issue, as are skills, lifelong learning and career development. Inclusion in and access to the labour market, as well as work–life balance, also feature among the issues to be monitored. However, perhaps the most important policy consideration is introducing greater flexibility alongside increased job security in order to improve productivity and growth. This would involve creating a range of different jobs and working time options, while simultaneously ensuring that temporary and part-time workers do not have to endure worse working conditions than those in full-time and permanent jobs. The implementation of EU directives on temporary and part-time work in Eastern Europe might also be important in this context, as would the EU directive on temporary agency work, to help ensure that temporary and part-time workers are not disadvantaged.

Policymakers should also be aware, nevertheless, that lack of legislation is not necessarily the problem, but rather the full implementation of existing regulations in those regions and countries where it is required the most. Moreover, the tradition of evading regulations, along with the important role of the informal economy in some regions of southern and Eastern Europe, should also be borne in mind. It is perhaps no coincidence that these particular regions report the worst working conditions, possibly because a significant proportion of the work takes place in the unregulated informal sector, which in turn makes it more difficult to implement the regulations. Nonetheless, it should be noted that over-regulation can also have the effect of stimulating the informal economy (Schneider and Enste, 2000).

Working conditions deserve particular attention in the NMS and ACC3, as well as in some southern European countries, such as Greece and Portugal. In these countries, satisfaction with working conditions was substantially lower compared with that of the older EU countries; in particular, conditions were more adverse for lower-skilled and manual workers than for professionals and managers. Despite the long hours and low rewards, having a job was important to people in these countries, since without a job, living conditions would fall even further; this in turn would impact heavily on quality of life as measured by life satisfaction. The issue of working hours should be addressed in these countries, since it was found that more than half of the population are working over 40 hours a week. This is particularly evident in Romania, Bulgaria and Turkey, where nearly two-thirds of workers were working more than 40 hours a week. At the same time, the long hours can

probably be partly attributed to the low hourly wage, which means that people have to work longer to make ends meet. Therefore, the issue of working hours cannot be addressed in isolation from the issue of wage levels.

In the context of the European Social Policy Agenda, improving working conditions across the EU, particularly in Eastern Europe, represents an important priority. Working conditions are likely to become even more disparate when Bulgaria, Romania and Turkey join the EU. At present, a two-tier level of life satisfaction and working conditions may be found in Europe, which is likely to become even more pronounced with the accession of these new countries.

For the social partners, it is important to address the problems of poor working conditions, particularly in relation to low pay and insecure contracts in the eastern and southern countries. As social dialogue is underdeveloped in many of these countries, it will also be necessary to find new forms of communication in the workplace, following the transition from the communist regime.

If quality of work is to be a priority for the EU, then basic aspects of working conditions need to be addressed in the newly acceding countries, as well as in some of the existing countries of eastern and southern Europe, to prevent this divide from widening even further.

Therefore, to conclude, policies need to be addressed at different levels:

- At EU level, there is a need to promote social dialogue, reduce working hours in eastern and southern Europe, and improve and ensure the implementation of regulations governing short-term contracts. It is also important to provide a framework for work–life balance policies to ensure European standards. These might represent long-term goals. In the short term, low pay and long hours might be necessary to attract investment and thereby strengthen the economies of these countries. Tackling unemployment would also represent an important measure for improving the quality of life.
- At national level, there is a need to find ways of maintaining work–life balance in harmony with national cultures of work and care, as well as ensuring the implementation of regulations governing working time and short-term contracts. The need to increase wages is, in general, one of national economic policy. Tackling unemployment is also a national-level issue.

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