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Reported Levels of Time-based and Strain-based Conflict Between Work and Family Roles in Europe: A Multilevel Approach

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Abstract What are the determinants of the *subjective experience* of conflict between work and family roles among dual-earner couples in Europe? Taking a demands-and-resources approach, this study investigates the individual and macro-level factors that generate perceptions of negative spill-over from work to family. Comparative survey data for 23 countries come from Round 2 of the European Social Survey. The empirical results support theoretical arguments for a conceptual distinction between time- and strain-based work-family conflicts. The findings also reveal important sex differences in the ways that perceptions of conflict are generated. Moreover, the results from multilevel analyses suggest that the experience of work-family conflict among dual-earner couples is only weakly moderated by institutional or cultural effects.

Keywords Work-family conflict · Dual-earners · Europe · Multilevel model

1 Introduction

'Work-life balance' is an often used expression in policy documents as well as among academics. Despite its frequent usage, however, it lacks a standard definition. Risk factors for the onset of work-life imbalance are typically assumed to include long, unsocial or unpredictable work hours, high work pressure and the absence of supportive work-life policies (Byron 2005; Voyandoff 2004; Batt and Valcour 2003; Dex and Bond 2005), while the feared consequences include adverse effects on individuals' psychological and physical health, lowered productivity at work, a deterioration of relationship quality at home and restrained fertility (for overview, see Allen et al. 2000). Yet, this 'objectivist' view on work-life integration fails to acknowledge 'the complex psychological processes by which people make sense of their time and manage multiple life domains' (Thompson and Bunderson 2001, p. 18). Acknowledging that work-family balance is a highly

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subjective, perceptual phenomenon, we may define it as a situation that is achieved when an individual *perceives* his or her major life domains and the different roles s/he plays in them to be compatible with each other.

As has been stressed by a number of scholars, the aim of achieving a satisfactory work-life balance is more than a 'zero-sum time allocation exercise' (Thompson and Bunderson 2001; Marks 1977; Sieber 1974; Greenhaus and Powell 2006; Nazio and MacInnes 2007; Hamermesh and Lee 2007). How individuals evaluate their own particular mode of work-life integration will, apart from more objective role demands, depend on their specific needs and expectations. Factors such as long working hours and a high workload are likely to be important factors in determining the degree to which an individual is able to balance the demands of work and family responsibilities. However, people's sense of the degree to which they achieved a satisfactory resolution of the multiple demands of their work and family roles will be moulded by the broader meanings that they attach to different life domains and their participation in the work-family system.

Work-family balance can be seen as a meta-level concept, referring to a combination of processes of positive and negative spill-over between work and family—also referred to in the literature as work-family facilitation and work-family conflict, respectively (Grzywacz and Butler 2005). In this study, we focus on the investigation of work-family conflict, using a 'demands-and-resources approach'. We investigate the individual and macro-level determinants of the perception of conflict between work and family roles among women and men as part of dual-earner couples in Europe.

2 State of Knowledge

There is a phenomenal amount of research that has examined the risk factors for the onset and the outcomes of work-family conflict. Yet, most of this research is based on data for single countries (e.g. Voyandoff 2004 for the US; Kinnunen and Mauno 1998 for Finland; Grönlund 2007 for Sweden; Russell et al. 2007 for Ireland; de Luis Carnicer et al. 2004 for Spain; Dex and Bond 2005 for the UK; Jansen et al. 2003 for the Netherlands). Comparative research that attempts to explain country-differences in work-family conflict is still scarce. Therefore, little is known for the moment about potential institutional or cultural effects. The examination of cross-country variations in perceptions of work-family conflict is a central aim of this study, which undertakes a multilevel analysis of work-family conflict, drawing on comparative survey data for 23 European countries.

Available comparative research on the experience of work-family conflict in Europe (Tang and Cousins 2005; van der Lippe et al. 2006; Strandh and Nordenmark 2006; Crompton and Lyonette 2006; Scherer and Steiber 2007) suggests that family policy has no alleviating effect on work-family conflict. These studies find comparatively high levels of work-family conflict in countries such as Sweden, France or Slovenia, which are known for their highly developed reconciliation policies. This may appear surprising, in the context of a policy discourse that has repeatedly stressed the importance of family-friendly policies for facilitating the combination of employment with care responsibilities. As an alternative to the 'family-policy-hypothesis' the 'gender-culture hypothesis' has been put forward, i.e. the argument that work-family conflict is most commonly experienced in countries where women have become dissatisfied with the way paid and unpaid work responsibilities are divided between the sexes. The thesis is that 'the emancipation process causes time pressure' (van der Lippe et al. 2006; see also Strandh and Nordenmark 2006). Another attempt at explanation focuses on sample selection effects, suggesting that work-family

conflict is particularly acute in countries where most women are employed and not just those who find it particularly easy to combine work and family responsibilities (Scherer and Steiber 2007). Overall, these findings from comparative research are based on data for rather small sets of countries. Hence, it remains to be shown, whether the hypotheses that have been put forward hold also for different sets of countries.

3 Theoretical Framework and Main Hypotheses

The theoretical frame that has been most widely applied in the study of how employment and family life affect each other is the *role conflict* perspective derived from the 'scarcity' approach (Marks 1977). From this view, engagement in multiple roles inevitably creates time pressure and strain, as the different roles compete for an individual's limited time and energy. A central concept in this field of research is *work-family conflict*, defined as a form of inter-role conflict in which the demands of work and family roles are incompatible in some respect—so that meeting the demands in one domain makes it difficult to meet the demands in the other domain (Greenhaus and Beutell 1985). More seldom applied are role 'expansion' approaches that recognise that experiences in and resources associated with one role can also positively affect the performance of another role (Marks 1977; Barnett and Hyde 2001; Sieber 1974). Greenhaus and Powell (2006) refer to such mechanisms that create positive effects of combining work and family as *work-family enrichment* (see also Carlson et al. 2006). As stressed by Marks (1977), 'enriching' experiences in one role (e.g. challenging work, stimulating social contacts at work, or fulfilling family life) can create energy that can then be used in other roles. Today, the general consensus is that work and family influence each other both in positive and negative ways (Barnett and Hyde 2001).

The focus of this study is on work-to-family conflict, which has been found to be more commonly experienced than family-to-work conflict (Frone et al. 1992; Kinnunen and Mauno 1998). Moreover, in contrast to most existing studies on the sources of work-family conflict, this study conceptually and analytically distinguishes between two types of conflict: time- and strain-based (cf. Greenhaus and Beutell 1985). This distinction accounts for the mounting evidence from prior research that would suggest that the different types of work-family conflict are differently shaped and associated with different consequences (Allen et al. 2000; Carlson et al. 2000; Van Hoof et al. 2005; Lapierre and Allen 2006). Moreover, the distinction allows for more conceptual specificity, which is desirable especially when measuring the concept in different societal contexts.

As a framework for investigating work-to-family conflict, we use a demands-and-resources approach (Voyandoff 2005), which is inspired by Karasek's demand-control model of strain (Karasek 1979). From this perspective, we divide work-related characteristics into two broad categories: demands and resources. Work demands refer to the work-role requirements that workers meet by exerting physical or mental effort (Voyandoff 2004). They are associated with time costs and/or energy depletion (e.g. long work hours, high work pressure). Work resources, by contrast, are assets that can be used to cope with demands and that may create additional energy (Voyandoff 2004). Such enabling resources are held to be created in jobs that are associated with characteristics such as high levels of skill and intrinsic task quality, job autonomy, co-worker and supervisor support.

Distinguishing between time- and strain-based conflicts, it follows that we also assess two types of *work demands*: time- and strain-based (cf. Voyandoff 2005). The concept of time-based demands reflects the idea that time is a fixed resource, and hence that time spent at the workplace subtracts from the time available for family-related pursuits. Time-based

demands include the amount of time spent in paid work, but also factors that are related to the scheduling and predictability of hours (e.g. being required to work extra hours at short notice, shift work, weekend work). Strain-based demands, by contrast, may exert a negative influence on work-life balance through mechanisms such as energy depletion. Strain-based demands include time and workload pressure as well as feelings of job insecurity. Apart from work demands, we also examine work-related enabling resources (e.g. skills developed at work) and psychological rewards that may enhance work-family balance by increasing people's capacities to perform their roles. Moreover, we also consider family-related demands associated with tasks like housekeeping and care-giving as well as family-related resources in the form of partners' contribution to the household income and to meeting family demands, as potentially important factors in the experience of work-family conflict. Finally, we also aim to account for attitudinal factors that may have a mediating effect on how demands and resources are perceived (for hypotheses, see below).

3.1 Hypotheses on Work-related Demands and Resources

In general, we would expect time- and strain-based demands to have stronger effects, respectively, on time- and strain-based conflict (henceforth: TBC and SBC). Yet, we acknowledge that an extensive time involvement in work can also generate strain (Greenhaus and Beutell 1985). In terms of time-based demands, our expectation is that the time devoted to paid work—and how work hours are scheduled—affect workers' and their partners' odds of experiencing work-family conflict. Long working hours are expected to increase TBC and SBC given that they do not only imply less time available for family life; but also that work takes up of lot of a person's energy. Moreover, long hours are most likely to create TBC when they involve overtime work at short notice. Such unpredictable hours are likely to affect also partners' experience of conflict, given that they undermine the possibility for partners' to co-ordinate their schedules. A partner whose work hours are unpredictable is an undependable participant in family activities and is thus likely to increase the other partner's domestic workload. Finally, working unsocial hours such as at weekends or during non-day shifts (evening/night work) should have detrimental effects on the experience of work-life balance (Burchell et al. 2007), irrespective of whether or not they are predictable, given that such schedules prevent workers from being at home when family activities tend to take place.

In terms of strain-based demands, our expectation is that work pressure (e.g. high workload, tight deadlines), which may create permanent work stress and fatigue, is associated with work-family conflict. Moreover, we would expect feelings of job insecurity to affect work-life balance negatively. The fear of loosing one's job threatens economic well-being and is likely to also cause emotional stress (Batt and Valcour 2003). Finally, also work characteristics associated with highly skilled jobs, such as greater levels of decision authority, responsibility and liability may be seen to constitute strain-based work demands. From a different point of view, however, the characteristics associated with more highly skilled jobs may also be seen as *work-related resources* that buffer the effects of work demands. The expectation would be that individuals can better manage the demands of work when they enjoy a substantial amount of control over how and when work is done. Following the logic of Karasek's (1979) demand-control model of work-related strain, we hypothesise that workers who face high job demands are more likely to experience psychological distress and in turn work-family conflict, when they enjoy a low level of job and schedule control (cf. Hill et al. 2001; Grzywacz and Butler 2005). When workers have some control over when they work this enables them to better co-ordinate their schedules

with family duties, thus reducing time-based strain. Moreover, decision latitude at work has the potential to generate psychological rewards that could be expected to have an alleviating effect on work-family conflict (mechanism of energy creation).

Other work resources that have the potential of buffering the impact of work and/or family demands are associated with firm-level policies such as the availability of parental leave, on-site care facilities or flexible work time arrangements (Major et al. 2002; Voyandoff 2004). There is evidence which would suggest that larger firms—as well as female-dominated firms—tend to be more 'family friendly' in these regards (Davis and Kalleberg 2006; Riedmann et al. 2006) and may thus support parents in reconciling work and family responsibilities.

3.2 Hypotheses on Family-related Demands and Resources

We expect factors that imply that a person will have to spend large amounts of time on housework or care-giving to be associated with elevated levels of TBC. In particular, we expect workers with more and younger children to be more likely to experience conflict. The division of paid and unpaid work duties between the partners is also expected to play a role: conflict is more likely to occur the more hours the partner works and the less s/he contributes to domestic work and care duties. Household income may also be an important factor. A high income represents a resource that can be used to reduce family-related demands (e.g. purchase of support services) and is therefore expected to have an alleviating effect on work-family conflict. The counter-hypothesis is based on the argument developed by Linder (1970) and more recently Hamermesh and Lee (2007), namely that economic affluence creates time pressure. The latter study suggests that adults in high-income households tend to perceive more time stress, even after controlling for the amount of time they actually spend in paid and unpaid work. The authors reason that high-income families experience more time stress, all else equal, because their wealth allows them to consume more, yet time limits their ability to use that wealth fully. The expectation would thus be that complaints about a lack of time for non-work pursuits are more commonly expressed by well-off couples who feel negatively about the fact they cannot engage in all the family activities they could afford to.

3.3 Hypotheses on Attitudinal Factors

This so-called 'yuppie-kvetch-hypothesis' put forward by Hamermesh and Lee (see also McGinnity and Calvert, this volume) is an exemplification of the general claim of this study, namely that the experience of time pressure is a highly subjective phenomenon. Another thesis about attitudinal effects, deriving from comparative research, is that people's conceptions of desirable gender roles in society affects their experience of work-family conflict. Women with egalitarian gender attitudes, so the argument goes, *are more likely to experience the gender division of work as unfair* and are, for this reason, held to be more likely to report work-family conflict. However, while one could expect women with egalitarian views on gender roles to be more prone to experience conflict in the light of the continuing traditionalism in the gender division of work in society, it is also clear that some of these women will be able to put their ideal of a more equal division of labour into practice. Hence, under the assumption that such women tend to be partnered with men who share their egalitarian views and who are thus more likely to substantially contribute to the unpaid work that needs to be done in the home, women's gender attitudes may show little effect at the individual level.

4 Data and Method

Comparative survey data for this study come from Round 2 of the European Social Survey (ESS) fielded in 2004/2005.[1] Our sample consists of 2,147 women and 1,960 men, aged 20–60, who live in co-residential union with their partner and have at least one child below age 18. We focus on dual-earner couples and test the mutual effect of respondents' and their partners' working conditions on their experience of work-family conflict. Due to the fact that information on some central characteristics of people's jobs is not available for the self-employed (e.g. work pressure, job security), the sample is restricted to dependently employed workers. We investigate the experience of work-family conflict among couples from 23 countries, i.e. all countries included in the ESS, except for Turkey and the Ukraine. Moreover, given that the Western and Eastern part of Germany as well as the Flemish and the Walloon regions in Belgium strongly differ from each other in terms of the extent of female labour market participation as well as regards labour market and economic conditions and the design of family policy, these are treated as separate higher-level units in the analysis.

Our outcomes of interest are perceptions of work-home interference, focusing on processes of *negative spill-over from work to family* and distinguishing between time- and strain-based conflicts (henceforth denoted as TBC and SBC). As outcome measures, we use responses to the following questions (answer categories: never, hardly ever, sometimes, often or always): 'How often do you find that your job prevents you from giving the time you want to your partner or family?' (TBC) and 'How often do you feel too tired after work to enjoy the things you would like to do at home?' (SBC). Our measure of TBC taps perceptions of work-family interference, which occur when one's job makes it difficult to successfully play one's roles in the partnership and family, because of *limited time availability*. Our measure of SBC taps perceptions of *energy depletion* (exhaustion) so that after the fulfilment of work duties, little energy is left to attend to one's non-work interests. As most measures of SBC available from the literature, the question suffers from an ambiguous definition of the dimensions 'work' and 'family' (Pichler 2008). Given its wording, it seems most appropriate to take it as a measure of people's dissatisfaction with how they currently divide their energy between their *work duties*, including market work and unpaid family work, one the one hand, and *non-work interests*, on the other. Moreover, in contrast to many of the measures of SBC as part of work-family conflict scales developed and validated in the literature (e.g. Carlson et al. 2000), our measure of SBC focuses on perceptions of exhaustion and does not include effects in terms of 'emotional strain' (e.g. in the form of anxiety/depression).

4.1 Method Used and Results of Variance Components Model

To analyse perceptions of work-family conflict in 23 countries, we use multilevel modelling techniques. By allowing residual components at the individual- and country-level, multilevel models are able to handle clustered data (respondents nested within countries). The country-level residuals (henceforth called 'country-effects') represent unobserved national characteristics affecting individual outcomes. The presence of such unobserved factors leads to a situation in which the outcomes for individuals from the same country are correlated. In contrast to single-level regression techniques, which ignore such correlations, multilevel models account for the fact that individual observations from the same

[1] For details on data, see www.europeansocialsurvey.org.

Table 1 Multilevel multivariate normal response models for time- and strain-based conflict I

NULL MODEL	Women		Men		Pooled	
	TBC	SBC	TBC	SBC	TBC	SBC
FIXED EFFECTS						
Intercept	.02	.00	.00	-.01	.49	-.63 (*)
Female					**-.07****	**.12*****
RANDOM EFFECTS	*Between-countries covariance matrix*					
Country-level variances	**.03****	**.03***	**.02***	.01(*)	**.02***	**.02***
Country-level covariance	**.02***		**.01***		**.01***	
RANDOM EFFECTS	*Within-countries covariance matrix*					
Individual-level variances	**.78*****	**.79*****	**.80*****	**.80*****	**.79*****	**.79*****
Individual-level covariance	**.42*****		**.40*****		**.41*****	
Variance partitioning coeff.	.04	.03	.02	.01	.02	.02
DIC (DF) [xvi]	10,128 (39)		9,674 (27)		20,031 (42)	
N	2,147		1,960		4,107	

The DIC is the Bayesian Deviance Information Criterion. It is a goodness of fit measure which decreases with the quality of the model fit. A decline in the DIC by at least three points would suggest the move to a better fitting model

Sample: 2,147 women and 1,960 men, aged 20-60, from 23 countries (25 country-level units), with at least one child below age 18 in the household, in dependent employment and living in co-residential union with a dependently employed partner
Dependent variables: TBC-time-based work-family conflict and SBC-strain-based work-family conflict (modelled jointly)
*** p<0.001; **p<0.01; *p<0.05; (*) p<0.07

country are unlikely to be independent and by this avoid an overstatement of statistical significance.

We employ a technique called *multivariate multilevel modelling*. The term 'multivariate' refers here to the fact that such models involve two or more response variables, which are modelled jointly. This allows us to analyse TBC and SBC jointly—and hence to draw conclusions about the strength of correlations between our two types of conflict and about the extent to which such correlations depend on the individual- or the country-level. Moreover, this type of model allows us to test whether the effect of an explanatory variable on TBC differs from its effect on SBC (Snijders and Bosker 1999). Our two outcome measures are modelled as continuous responses. The variables are measured on 5-point scales, yet they are close to normally distributed.[2] To ease estimation, our outcome measures and all of the continuous explanatory variables have been standardised so that they have a mean of 0 and a variance of 1.[3] The models are estimated using the Bayesian Markov-Chain-Monte-Carlo (MCMC) estimation procedure available in MLwiN (Browne 2005). In a first step, we estimate a bi-variate multilevel model without any explanatory variables ('null model'). The parameters in this model (Table 1) include a fixed effect for the overall intercept for each of the two responses, and in the random part of the model, a set of variance-covariance parameters which inform us about the extent to which the two types of conflict are correlated with each other.[4]

The null model shows that inter-dependency is present in our individual observations (Table 1). Multilevel models account for this by partitioning the total variance in the outcomes into two components, i.e. the variance that is based on differences between countries and the residual individual-level variance. The null model—also called variance components model—suggests that only 3–4% of the variance in conflict across female workers is located

[2] The transformation of the two outcome measures into standard normal scores allows us to treat the responses as if they were continuously distributed, and to use linear multilevel estimates.

[3] This is done using the NSCOres command in MLwiN, which assigns expected values from the standard normal distribution according to the ranks of the original scores in the form of Normal Equivalent Deviates (NED).

[4] We have also run single-level models with dummy codes representing group-membership (country fixed effects) to account for non-independence in the data (instead of random intercepts). These models yield very similar results regarding the effects of individual-level predictors (in Models 1 and 2) and of (residual) country-effects.

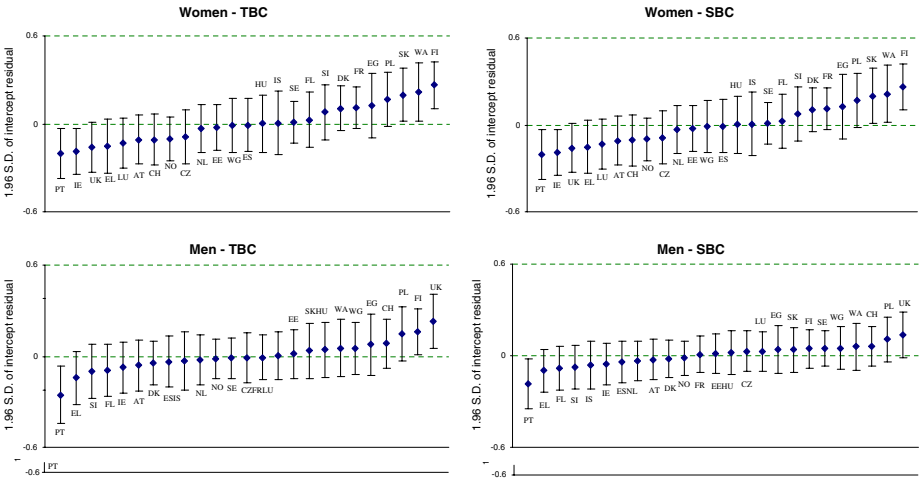

Fig. 1 Country-level intercept-residuals with 95% confidence intervals, null model. Note: Graphical illustration of country-effects based on 'null model' as reported in Table 1. The dotted line refers to the cross-country average in the level of time- and strain-based conflict (TBC and SBC, respectively)

at the country-level. Dependency is estimated to be even weaker among men.[5] Hence, countries appear to be rather unimportant for explaining the occurrence of conflict. The plots of country-level intercept residuals and their 95% confidence intervals (Fig. 1) illustrate the limited evidence for country-effects (the dotted line represents the country-average).[6]

The null model also shows that the correlation between the two types of conflict is rather muted. For both women and men, the covariance between TBC and SBC at the individual level is estimated to be around 0.4 (Table 1), corresponding to a population correlation coefficient of 0.5. This renders support to the argument that the two types of conflict are distinct constructs that are likely to have different antecedents and consequences (Lapierre and Allen 2006). Table 1 also shows a model based on the pooled sample of female and male employees. The estimated 'gross' differences between the sexes in the experience of conflict (i.e. before we control for any other individual-level factors) suggest that women tend to experience lower levels of TBC but higher levels of SBC than men. When we control for working hours, women are found to experience both types of conflict significantly more often than men.[7]

4.2 Modelling Strategy and Predictors

Given that most of the variation in work-family conflict seems to be due to individual differences, we focus on the investigation of individual-level factors hypothesised to affect people's perception of conflict. Our expectation is that—in the presence of compositional

[5] The variance partitioning coefficient is computed from the estimated variance parameters. For instance, for women, it amounts to 0.03/(0.03 + 0.78) = 0.04 for TBC, suggesting that 4% of the variance is located at the country-level. For men, it amounts to 0.02/(0.02 + 0.80) = 0.02 for TBC.

[6] Among women we find significantly higher levels of TBC and SBC than on country-average in Finland, Wallonia and Slovakia, and lower levels of TBC and SBC in Portugal and Ireland. Among men, we find significantly higher levels of TBC in the UK and Finland, and lower levels of TBC and SBC in Portugal.

[7] Controlling only for the number of working hours (and not the full set of individual level controls as in Table 2), the coefficients for 'female' change to .14*** (TBC) and .25*** (SBC, not shown).

effects—individual-level factors will also help to explain observed country-effects. In the event that after controlling for diverse role demands/resources associated with the work and family domains, we still find evidence for country-effects, however, we will also investigate macro-level institutional and cultural effects.

We test a set of family and work-related factors, including the number and age of children, the skill level of respondents' job, the level of work pressure and job insecurity, respondents' and their partners' working hours and work schedules (occurrence of evening work, weekend work, overtime at short notice, autonomy in varying starting and finishing times), firm level characteristics (size and share of employees who are women), hours spent on housework, the within-country household income rank and people's personal evaluation of their living standard. A description of how these variables have been measured and coded is given in the Appendix 1.

5 Results

As shown in Table 2, *time-based work demands* are strongly associated with the experience of work-family conflict both among women and men. Long working hours, working non-day schedules or at weekends and having to work overtime at short notice ('unpredictable work hours') show an aggravating effect on conflict, with long and unsocial hours being more strongly related to TBC than to SBC. Also *strain-based work demands* appear to play a pivotal role in the creation of conflict. The more people feel that they have to work hard in their jobs ('work pressure'), the higher their perceived levels of conflict tend to be. Work pressure shows an effect on both types of conflict, suggesting that 'working hard' involves the engagement in mentally and/or physically demanding work tasks but also a considerable time-involvement. Feelings of job insecurity are positively related to TBC. Moreover, for men but not for women, we find job insecurity to be related also to elevated SBC, suggesting that worries about the security of one's job and income tend to trigger a greater time involvement (e.g. second job or job search activities) but also represent a source of stress.

To test whether enabling resources associated with high-quality jobs have a buffering effect on the experience of conflict, we look at respondents' evaluation of their level of time and job autonomy and of their opportunities for advancement. We find empirical support for the hypothesis that a high degree of *control over how one's daily work is organised* ('job autonomy') can help people to better co-ordinate the time demands of their work and family roles. Yet, such an effect is found only for women. Also the impression of good career chances appears to play a buffering role in the creation of conflict (SBC). Moreover, a higher level of job skill appears to increase women's and men's sense that their *job prevents them from giving more time to their partners and families* (TBC), and is also related to SBC, i.e. the feeling that one is often too tired after work to engage in non-work activities. Notably, the level of job skill is more strongly related to TBC than to SBC. Overall, these findings can be read as supporting evidence for the thesis that resources associated with more highly skilled jobs have the potential to reduce the effect of work demands. However, when compared to the effects found for work demands, the observed relations between work resources and the experience of conflict tend to be less robust.[8]

[8] For instance, we find no significant effect of time-autonomy, which may be explained by the fact that the mere possibility to control starting and finishing times is a low level of time-autonomy when compared to more advanced flexi-time schemes that permit workers to take full days or even longer periods of time off to compensate for accumulated credit hours (time accounts).

Table 2 Multilevel multivariate normal response models for time- and strain-based conflict II

MODEL 1	Women		Men		Pooled		***Pooled Gender differences***	
	TBC	SBC	TBC	SBC	TBC	SBC	TBC	SBC
FIXED EFFECTS								
Intercept	**-.19****	-.08	**-.25*****	-.04	**-.31*****	**-.19*****		
Female					**.18*****	**.23*****		
Age	-.04(*)	.00	**-.11*****	-.03	**-.08*****	-.02	**(+)**	
Family								
Age of youngest child (ref: school)								
Infant (0-2)	**.11***	-.02	.00	.03	.06	.01	**(+)**	
3 < schooling age	.09(*)	.06	.04	-.02	.06(*)	.03		
Number of children (ref: two)								
One	.00	.01	-.06	-.05	-.02	-.01		
Three or more	.08(*)	.05	.09(*)	.03	**.08***	.04		
Employment								
Work hours	**.19*****	**.12*****	**.14*****	**.04***	**.18*****	**.10*****		**+**
Evening/night work	**.24*****	**.18****	**.18****	.03	**.20****	**.09***		**(+)**
Weekend work	**.17*****	**.11***	**.22*****	**.13****	**.20*****	**.12*****		
Unpredictable work hours	**.18*****	**.18*****	**.20*****	**.18*****	**.20*****	**.17*****		
Work pressure	**.15*****	**.17*****	**.17*****	**.20*****	**.16*****	**.19*****		
Job insecurity	**.06****	.01	**.08*****	**.08*****	**.07*****	**.04****		**+**
Skill level of job	**.13*****	**.06***	**.08*****	.03	**.11*****	**.05****	**(+)**	
Job autonomy	**-.04***	-.04	.00	.01	-.03	-.02		
Time autonomy	-.04	-.04	-.03	.00	-.03	-.03		
Career chances	.02	-.03	-.03	-.04(*)	.00	**-.03***		
Firm size (ref: 25-99)								
Less than10	-.03	**-.16****	.07	-.10	.01	**-.14*****		
10-24	-.03	-.02	.04	**-.15***	.01	-.07(*)		
100-499	.00	-.08	.01	**-.13***	.01	**-.11****		
500 or more	-.01	-.04	**.13***	-.04	.06	-.04		
% women at workplace	**-.04***	.00	-.01	-.03	**-.04***	-.02		
Partner								
Work hours	**-.05***	.00	-.03	.01	**-.04****	.00		
Evening/nightwork	.05	.02	.04	.00	.04	.02		
Weekend work	.04	.01	-.01	-.05	.01	-.01		
Unpredictable work hours	.00	.07(*)	.06	.07	.02	**.07***		
Household employment pattern								
Work hours* hours partner	.01	**-.05****	-.01	-.03	.02	-.02		
Evening/night work* e/n work partner	-.14(*)	**-.26****	-.15(*)	.01	**-.13***	**-.13***		**+**
Income								
High HH income rank (within-country)	**.07*****	**.05***	**.06****	-.01	**.06*****	.02		
Attitudes								
Negative evaluation of HH income	**.13*****	**.14*****	.05(*)	**.09****	**.10*****	**.13*****		
Emancipation support	.00	.04	**-.05***	**-.05***	-.03	.00	**(+)**	**+**
RANDOM EFFECTS	***Residual between-countries covariance matrix***							
Country-level variance	**.03***	**.04***	**.01***	**.02***	**.02****	**.03****		
Country-level covariance	**.03***		.01(*)		**.02***			
	Residual within-countries (between-individuals) covariance matrix							
Individual-level variance	**.63*****	**.69*****	**.64*****	**.71*****	**.64*****	**.70*****		
Individual-level covariance	**.32*****		**.30*****		**.31****			
Variance partitioning coeff.	.05	.05	.02	.03	.03	.04		
Pseudo R^2 individual-level	.19	.11	.21	.10	.19	.10		
DIC (DF)	9,943 (62)		9,252 (85)		19,107 (100)			
N	2,147		1,960		4,107			

DIC (DF)—Refer to Table 1's 1st footnote

Sample: 2,147 women and 1,960 men, aged 20–60, from 23 countries (25 country-level units), with at least one child below age 18 in the household, in dependent employment and living in co-residential union with a dependently employed partner

Dependent variables: TBC-time-based work-family conflict and SBC-strain-based work-family conflict (modelled jointly)

R^2 is estimated following the approach proposed by Snijders and Bosker (1999: 102)

‖Between columns: differences in the strength of effects on TBC and SBC are significant at $P < 0.05$

+Differences in the strength of effects between women and men are significant at $P < 0.05$ (+) at $P < 0.07$

*** $P < 0.001$; ** $P < 0.01$; * $P < 0.05$; (*) $P < 0.07$

We find evidence for a non-linear firm-size effect, with the highest levels of SBC associated with the employment in medium-sized enterprises (25–99 employees) but lower levels of SBC observed for smaller and for larger firms. For women, our results suggest that the optimal firm in terms of work-life balance employs less than ten people and is female-dominated: while high shares of women at the workplace are related to lower levels of TBC, micro-firms seem to help women in preventing SBC. The hypothesis that large firms are most conducive to work-life balance is not supported.[9]

As argued, a higher income may reduce conflict when it is used to purchase support services from the market, while at the same time it can also trigger perceptions of time pressure ('yuppie-kvetch-hypothesis'). Our results render some support to the hypothesis that affluence creates time stress. People from higher income households (relative to the country-average) tend to experience greater levels of TBC. Yet, this conclusion is challenged by the additional effect of respondents' evaluation of how easy or difficult it is to live on their present income: although this variable correlates negatively with higher income ranks, it also enters with a positive sign. Income insufficiency affects both types of conflict, suggesting that people in financially precarious situations work harder than their more well-off counterparts and may take on additional hours of informal work.[10] Overall, the thesis that affluence causes time stress is supported and we find the 'affluence effect' to increase in magnitude when we control for economic strain.[11]

The experience of conflict is found to be related to childcare responsibilities. People with three or more children in the household, and especially with children aged below three, face an increased risk of TBC. It is to be noted though, that we may underestimate the strength of such effects, given that fertility decisions are endogenous to people's willingness/capability to combine work with parenthood. That is, people who find it relatively easy to integrate work and family roles, may decide to have more children, while those who experience conflicts between their roles as workers and parents may not be employed when their children are small or at least adapt their work situation so as to avoid such conflicts. More generally, when estimating effects on work-family conflict using cross-sectional data, we need to be aware that individuals may engage in 'adaptive strategies' to avoid conflict between their work and family roles (Becker and Moen 1999; Haddock et al. 2001). Such strategies may involve limiting time spent in paid work and sacrificing career advancements (changing jobs or quitting paid work[12]), reducing time spent on housework (e.g. getting outside help for family work), or limiting childbearing. This would also explain why the *number of hours that people spend on housework* is not found to show a relation with either type of conflict (omitted from final models). Those people who are most prone to experience

[9] Firm-size effects may be related to the public/private divide. Yet, this cannot be tested as the ESS2e03 does not include an indicator for the sector of employment.

[10] Given that we control for the number of hours spent in formal work, additional TBC due to economic hardship may result from time-demands that are not covered in this survey, i.e. informal work as a survival strategy, especially in the less affluent countries of Central and Eastern Europe.

[11] When we exclude the measure of income insufficiency from Model 1 (Pooled), the effect of income rank is reduced from .06*** to .04** and the DIC increases to 19,150, indicating a worse model fit.

[12] The problem of sample selection may arise, given that our outcome is observed only for people who are presently employed. This would lead to estimation bias in the event that the mechanism through which people select into our sample depends on unobservables that correlate with the model errors. In an attempt to test for sample selection bias, we computed an inverse Mills ratio from a probit model of labour market participation with past experience of unemployment as an instrument that affects the participation decision but is not related to the experience of conflict. The results suggest that sample selection does not bias our results, either in the female or the male sample.

time pressure or fatigue may decide to do less housework (problem of reverse causality). Also the hypothesis that women with more egalitarian gender attitudes are more likely to experience work-family conflict is not supported. Instead, we find men who agree that 'men should take as much responsibility as women for home and children' ('emancipation support') to be less likely to feel conflict. This finding may result from a situation in which men with egalitarian attitudes are more likely to choose jobs that allow them to substantially contribute to housework and care tasks.

Evidence for a *cross-over* of conflict from one partner to the other is complex: our findings suggest that the worst combination for couples is when one of the partners works in the evenings or nights, while the other one does not. When both partners work such unsocial hours, effects are ameliorated (negative interaction effects between respondent's and their partner's incidence of evening/night work). This suggests that the possibility for partners to coordinate their schedules helps them to avoid conflict. It may also suggest that 'dual-career' couples represent a select group of people, who are less likely to perceive extensive work hours as a threat to work-life balance. Somewhat counter-intuitively, we find women to be *less* likely to report TBC when their partners work long hours. This may result from women's comparative evaluation of the time *they* have for the family as compared to their partner. Moreover, the effect of long-hours working for women's experience of SBC appears to be alleviated in situations in which their partners also work long hours (negative interaction effect), suggesting that female breadwinners face especially high work loads and hence risk of experiencing conflict.

One might expect that controlling for this set of work- and family-related factors, that has contributed to the explanation of individual differences in the experience of conflict, has also helped to explain some of our initial 'country-effects'. Yet, as suggested by Model 1, after controlling for a wide range of individual-level factors, there is still country-level variance left unexplained.[13] Despite the fact that the residual country-level variance is estimated to be rather small (5% of the total variance or less, see Table 2), we test some of the unresolved theses from comparative research. In particular, we test whether or not developed reconciliation policies have an alleviating effect ('family-policy-hypothesis') and whether or not it is the emancipation process that causes time pressure ('gender-culture-hypothesis'). Moreover, we control for economic affluence in terms of GDP per capita to test the 'yuppie-kvetch-hypothesis' also at the macro level as well as for the rate of unemployment to capture labour demand.

The results from Model 2 (see Table 3) suggest that national characteristics that are related to higher levels of work-family conflict include economic affluence and high unemployment[14], as well as 'emancipation pressure'—measured as the rate of agreement in a country to the statement: 'Men should take as much responsibility as women for home and children'. The more wide-spread this view is in a country, the more prevalent SBC tends to be. Moreover, we find women to be more likely to face TBC in countries that offer a good childcare infrastructure. Controlling for these four macro variables accounts for all residual country-level variation in the gender-specific models. However, a note of caution in interpreting these findings is warranted, given the severe limitations in terms of degrees of freedom when estimating macro-level effects based on a sample of 25 country-level units.

[13] The residual country-effects are: Among women, higher levels of conflict than on average are reported in Wallonia, France (TBC and SBC) and Denmark (SBC), while lower levels of conflict are reported in Portugal, Hungary (TBC and SBC) and Slovenia (SBC). Also among men, we find below-average levels of TBC and SBC in Portugal and Slovenia.

[14] These two macro-level variables correlate at $r = -0.07$.

Table 3 Multilevel multivariate normal response models for time- and strain-based conflict III

MODEL 2	Women		Men		Pooled		***Pooled Gender differences***	
	TBC	SBC	TBC	SBC	TBC	SBC	TBC	SBC
FIXEDEFFECTS								
Intercept	**-.19*** ‖**	-.07	**-.24*** ‖**	-.03	**-.31*** ‖**	**-.18***		
Individual Level								
(omitted,Table 2 for details)								
Country-level								
GDP per capita	**.15***	**.17****	**.12****	**.15***	**.13***	**.16***		
Unemployment rate	**.16***	**.14****	**.11****	**.11***	**.13***	**.13***		
Public childcare (0<3)	**.08****	.04	-.01	-.02	.04	.01	+	+
Emancipation pressure	-.01	.06	.04	**.06***	.01	.06(*)		
RANDOM EFFECTS	***Residual between-countries covariance matrix***							
Country-level variance	.01	.02	.01	.00	**.01***	**.02***		
Country-level covariance	.01		.00		.01			
	Residual within-countries (between-individuals) covariance matrix							
Individual-level variance	**.63*** ‖**	**.69***	**.64*** ‖**	**.72***	**.64*** ‖**	**.70***		
Individual-level covariance	**.32***		**.30***		**.31***			
Variance partitioning coeff.	-	-	-	-	.02	.03		
Pseudo R2 individual-level	.21	.14	.21	.11	.20	.11		
DIC (DF)[16]	9,940 (92)		9,253 (83)		19,108(100)			
N	2,147		1,960		4,107			

DIC (DF)—Refer to Table 1's 1st footnote

The individual-level predictors (same as in Table 2) are omitted from the output shown in this table. The estimated parameters are very similar to those reported in Table 2

‖ Between columns: differences in the strength of effects on TBC and SBC are significant at $P < 0.05$

+ Differences in the strength of effects between women and men are significant at $P < 0.05$

*** $P < 0.001$; ** $P < 0.01$; * $P < 0.05$; (*) $P < 0.07$

The results are best read as descriptive evidence for country-effects: i.e. when controlling for a set of individual-level factors pertaining to family- and work-related demands and resources, countries that stand out with above-average levels of work-family conflict in Europe are comparatively affluent, while they have high rates of unemployment, a good childcare infrastructure and an egalitarian gender culture. The study thus corroborates prior empirical work that has not found alleviating effects of reconciliation policies.[15]

6 Discussion and Conclusion

This study has sought to contribute to the explanation of the variation in experiences of work-family conflict that exists within and across 23 European countries. Multivariate multi-level models have been fitted to model the joint occurrence of two types of work-to-family conflict: time-based and strain-based (denoted by TBC and SBC). Our results support the view that these two types of conflict have different antecedents and therefore that their separate consideration can yield valuable insights into how people evaluate their work-life balance. The expectation that time-based demands have stronger effects on TBC than on SBC is supported; and explanations for observed differences in the strength of effects on TBC and SBC tend to be rather straight-forward:

[15] With the data at hand (25 country-level units), we are severely constrained in the attempt to investigate potential cross-country differences in how work-family conflict is generated. This would be an important avenue for future research, i.e. to test potential mediating effects of institutional/cultural conditions on individual-level mechanisms of conflict creation.

For instance, the finding that weekend work more strongly affects TBC than SBC is highly plausible, given that this is when family activities tend to take place (risk of TBC), while there is little reason to believe that employees who work on weekends face higher strain-based work demands. Unpredictable work hours, by contrast, are found to have an equally strong relation to both types of conflict, which can be explained by the fact that overtime hours at short notice tend to be performed at the end of work-days, thus increasing the risk for exhaustion after long work days (SBC), while restricting workers' time left for the pursuit of non-work interests after work (TBC). Also observed gender and age effects support decisions for an analytical distinction between different types of work-family conflict: there is evidence for increasing time-management skills with age (negative age effect on TBC) but, in accordance with expectations, not for a greater ability to deal with strain-based work demands at higher ages (no effect on SBC). Moreover, gender differences cut across the two types of conflict. Quite remarkably, we find women to report higher levels of SBC than men (but lower levels of TBC), before we even control for differences in working hours. The findings also reveal interesting sex differences in the ways that perceptions of work-family conflict are generated. While care duties for infants increase TBC only for women, job insecurity increases SBC only for men. This reflects the fact that in many families it is still the man who shoulders the main responsibility for securing the family's economic welfare, while the woman takes the main responsibility for care duties. Moreover, while long and unsocial work hours show similarly strong effects on women's and men's experience of TBC, such practices of long-hours working are more strongly related to women's than to men's experience of SBC. This also reflects the fact that in the traditional patterns of work-family integration, that tend to prevail in most societies, women's total work load increases more strongly with their paid work time as they tend to take over the bulk of unpaid domestic and care work irrespective of their paid work load.

Finally, a central finding of this study is that in the experience of work-family conflict among dual earner couples, upon which this study has focused, country-level variance plays a very modest role. Given the very limited evidence for country-effects, it is hardly possible to detect robust institutional or cultural effects. Moreover, a comparison with earlier cross-country comparative research (e.g. Burchell et al. 2007; van der Lippe et al. 2006; Crompton and Lyonette 2006) suggests that established country-effects are highly unstable across different studies, and are likely to be strongly dependent on the different measures of work-family balance or conflict used. For this reason, it seems more fruitful for future research on the topic to focus on the diverse mechanisms that lead to various types of work-family conflict, rather than to dwell on observed cross-country differences in the level of conflict and their potential explanations. In the light of mounting evidence that would suggest that different types of work-family conflict are differently determined, it would also be an important avenue for future research to link the different types of time- or strain-based conflict to diverse outcomes (e.g. job dissatisfaction, lowered productivity, stress-related health problems, etc.), as this would be a central means for deciding on the 'social importance' of the experience of different types of conflict between people's work and non-work roles and responsibilities.

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Appendix 1

See Table 4

Table 4 Description of model, outcome measures and predictors

	Variable name	Items and coding	[Min.; Max.] Mean		SD	
			Female	Male	Female	Male
Outcome measures						
Time-based conflict	TBC[a]	How often do you find that your job prevents you from giving the time you want to your partner or family? (1-never to 5-always)	[−1.3; 2.2] 0.01	[−1.4; 2.2] 0.00	0.90	0.90
Strain-based conflict	SBC[a]	How often do you feel too tired after work to enjoy the things you would like to do at home? (1-never to 5-always)	[−1.6; 2.2] 0.00	[−1.6; 2.4] 0.00	0.90	0.90
Individual-level predictors						
Time-based work demands	Work hours[a]	Sum of nr. of hours respondents normally work a week in their main job, including paid/unpaid overtime and commuting time	[−3.5; 3.5] 0.00	[−3.5; 3.5] 0.00	1.00	1.00
	Unpredictable hours	How often does work involve having to work overtime at short notice? (never, < once a month, once a month, several times a month, once a week, several times a week, every day), dummy, 1 = at least several times/month	[0; 1] 0.22	[0; 1] 0.37	0.42	0.48
	Evening/night work	How often does work involve working evenings or nights? (same scale as 'unpredictable hours'), dummy, 1 = at least several times/month	[0; 1] 0.30	[0; 1] 0.42	0.47	0.49
	Weekend work	How often does work involve working at weekends? (<once a month, once a month, several times a month, every week), dummy, 1 = at least several times/month	[0; 1] 0.26	[0; 1] 0.28	0.44	0.45
Strain-based work demands	Work pressure[a]	My job requires that I work very hard (1–5 strongly agree)	[−2.2; 1.4]−0.02	[−2.1; 1.5]−0.02	0.89	0.89
	Job insecurity[a]	My job is secure (1–4 very true, reversed)	[−1.6; 1.0]−0.03	[−1.6; 1.0]−0.02	0.85	0.85

Table 4 continued

	Variable name	Items and coding	[Min.; Max.] Mean		SD	
			Female	Male	Female	Male
Work-domain resources	Skill level of job[a, b]	Sum of years of education/vocational schooling beyond compulsory education s.o. would need if applying for R's job (0, < 1 year, 2, 3, 4–5, 6–7, 8–9, 10 + years) and the time it would take s.o. with the right qualifications to learn to do R's job well (1 day, 2–6 days, 1–4 weeks, 1–3 months, > 3 months–1 year, 1–2, 2–5, > 5 years)	[−3.2; 3.3] 0.00	[−3.3; 3.5] 0.00	1.00	1.00
	Time autonomy	I can decide the time I start and finish work (1–4 very true), dummy, 1 = true	[0; 1] 0.26	[0; 1] 0.37	0.44	0.48
	Job autonomy[a]	How much does the management at your work allow you to decide on how your own daily work is organised? (1-I have no control up to 10-I have complete control)	[−1.7; 1.3]−0.01	[−1.8; 1.3]−0.01	0.92	0.92
	Career chances[a]	My opportunities for advancement are good (1–5 strongly agree)	[−1.5; 2.0] 0.01	[−1.7; 2.0] 0.00	0.90	0.90
	Firm size	Firm size: less than 10, 10–24, 25–99, 100–499, 500 or more (categorical predictor)	[1; 5] 2.72	[1; 5] 2.99	1.32	1.32
	Female firm[a]	What is the proportion of women at your work-place? (none, very small, under a half, about half, over a half, very large, all), taken to represent 0, 10, 30, 50, 70, 80, and 100%	[−2.6; 1.5]−0.02	[−1.5; 2.8] 0.02	0.92	0.92

Table 4 continued

	Variable name	Items and coding	[Min.; Max.] Mean		SD	
			Female	Male	Female	Male
Family demands & resources	Age of youngest child	Youngest child is aged (a) 0–2, (b) 3 < compulsory schooling age or (c) has reached schooling age (categorical predictor)	[1; 3] 2.42	[1; 3] 2.41	0.78	0.80
	Number of children	Number of children aged < 18 (1, 2, 3 or more) (categorical predictor)	[1; 3] 1.85	[1; 3] 1.85	0.70	0.70
	Partner's work hours[a]	Nr. of hours partner normally works a week in his/her main job, including any paid or unpaid overtime	[−3.2; 2.9] 0.00	[−3.3; 3.3] 0.00	0.98	0.99
	Partner evening/night work	How often does partner's work involve working evenings or nights? (same scale as 'unpredictable hours'), dummy, 1 = at least several times/month	[0; 1] 0.41	[0; 1] 0.30	0.49	0.46
	Partner weekend work	How often does partner's work involve working at weekends? (<once a month, once a month, several times/month, every week), dummy, 1 = at least several times/month	[0; 1] 0.35	[0; 1]0.25	0.48	0.43
	Partner unpredictable work hours	How often does partner's work involve overtime work at short notice? (same scale as 'unpredictable hours'), dummy, 1 = at least several times/month	[0; 1] 0.37	[0; 1] 0.19	0.48	0.40
	Household income rank[a, c]	If you add up the income from all sources, which letter describes your household's total net income—within-country rank	[−3.0; 2.4] 0.00	[−3.1; 2.4] 0.00	0.99	0.99
Attitudes	Evaluation of HH income[a, d]	How do you feel about your household's income nowadays? (living comfortably, coping, finding it difficult, finding it very difficult)	[−0.9; 2.3] 0.03	[−0.8; 2.4] 0.03	0.82	0.82
	Emancipation support[a]	Men should take as much responsibility as women for home and children (1-agree strongly to 5-disagree strongly)	[−3.0; 0.8]−0.03	[−3.2; 1.0]−0.02	0.81	0.82
Demographics	Age[a]	Continuous variable, orig. ranging from 20 to 60	[−3.2; 3.5] 0.00	[−3.5; 3.5] 0.00	1.00	1.00
Country-level predictors						
GDP per capita[e, i]		GDP per capita in purchasing power parities	[−2.1; 2.0] 0.00		0.97	
Unemployment[f, i]		National unemployment rate for the year 2004	[−2.4; 2.4] 0.00		0.98	
Public childcare[g, i]		Childcare coverage with regard to children < 3	[−2.2; 2.2] 0.00		0.98	

Table 4 continued

Variable name	Items and coding	[Min.; Max.] Mean		SD	
		Female	Male	Female	Male
Emancipation pressure[h, i]	Country sample mean for emancipation support (see individual-level predictors)	[−2.2; 2.3] 0.00		0.97	

[a]The two categorical dependent variables are approximately normally distributed. They have been transformed by assigning normal scores to the overall distribution. This allows us to treat the responses as if they were continuously distributed, and to use linear multilevel estimates. To facilitate interpretation of regression coefficients, also all continuous scores on predictor variables were transformed into standard normal scores (with an overall mean of zero and an overall SD of 1). This has been done using the NSCOres command in MLwiN, which assigns expected values from the standard normal distribution according to the ranks of the original scores in the form of Normal Equivalent Deviates (NED)

[b]In the ESS, respondents are asked for the number of years of education/vocational schooling beyond compulsory education (if any) that someone would need when applying for their job. In a second step, they are asked for an estimate of how long it would then take a person with the right education/qualifications to learn to do the respondent's job reasonably well. Respondents are given a limited number of answer options to choose from. We assigned the mean value to each of the answer categories and used the resulting values for the construction of a summary measure of job skill level. Finally, this measure, which ranges from 0 to 15 years, was transformed to have a variance of 1 in each of the countries (within-country standardisation). However, in order to retain information about country-differences in the average level of job skill, the original country-specific means were kept. This procedure is able to account for the country-specific characteristics of skill formation systems (and other factors that might affect the skill structure) and should for this reason result in a measure of job skill whose regression coefficients are better comparable across countries [Countries differ with regard to how 'years of training' are related to the skill level of jobs. While the chances to be in a more highly skilled job—at a given skill level of the individual– are smaller in countries with more compressed skill structures, upon the within-country standardisation of the years of training required for a job, the effort to obtain an additional unit on the job-skill scale becomes the same across countries. This should result in a higher level of cross-country comparative correspondence between skill requirements and the actual skill level (quality) of the jobs]

[c]Households' total net income is measured in 12 income brackets. A certain level of income will be related to different levels of economic welfare across countries. Thus, to attain comparability across countries, the households' income rank within the respective country sample has been computed. The resulting measure is one of relative income (with higher values being related to higher incomes)

[d]In addition to the household income rank, we also take account of individuals' evaluation of income sufficiency. This variable correlates negatively with households' (within-country) income rank ($r = -0.4$). The fact that a low income rank is more likely to imply deprivation in less affluent countries explains why the correlation is rather modest

[e]Source: OECD (www.oecd.org/dataoecd/32/62/34256773.pdf); figures refer to GDP per capita in Purchasing Power Parities

[f]Sources: Eurostat New Cronos for most countries; figures relate to unemployment rates in the age group 25–49 for the year 2002; for Slovakia, figures from OECD Employment Outlook refer to unemployment rates of people aged 25–54 for 2003

[g]Sources: Plantenga and Remery for most countries ('Reconciliation of Work and Private Life. A Comparative Review of Thirty European Countries', Office for Official Publications of the European Communities, Luxembourg, 2005); for Britain, Finland, Portugal, Slovakia, and the Netherlands from the European Commission ('Indicators for Monitoring the Employment Guidelines Including Indicators for Additional Employment Analysis: 2006 Compendium'); for West and East Germany from Engelbrech & Jungkunst ('Erwerbsbeteiligung Von Frauen: Wie Bringt Man Beruf Und Kinder Unter Einen Hut?', Institut für Arbeits- und Berufsforschung (IAB), Nürnberg, IAB Kurzbericht 7/01). The Swiss sample almost entirely consists of women from the German-speaking regions. Here, childcare coverage tends to be very low and is estimated to be 5% (OECD 2005: Babies and Bosses)

[h]The values represent weighted means of the individual level variable 'emancipation support'. The country-means are based on the general population sample, including men and women aged 20–60

[i]Two of the correlations between macro-level factors are above ±0.03: GDP-Unemployment: −0.7, Childcare-Emancipation: +0.4

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