

Determinants of Work-life Balance: Shortcomings in the Contemporary Measurement of WLB in Large-scale Surveys

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Abstract Research on work-life balance (WLB) has presented important insights into the problems of combining family aspirations with paid work in relation to policy relevant agendas. Using the ESS II (2004/2005), we examine work-related and household/family-related causes of WLB. We can corroborate other research findings that show that work-related aspects explain by far the largest part of the variation in WLB. However, we illustrate that the measurement of WLB is partly problematic. Because WLB scales conceptualize the work component more specifically than the life component, what ‘life’ means remains rather intangible apart from general references to the ‘home’, ‘housework’ and ‘family responsibilities’. This largely neglects different emic dimensions to WLB common to specific subgroups and renders the measurement rather abstract. Second, the wordings of WLB indicators already include their most probable explanations. There is the danger of a circular argument here and many explanations seem tautological. This makes it difficult to conclude on the effects of other than work-related aspects on WLB, which are, arguably, also important aspects of WLB. Finally, WLB scales hardly correlate with relevant external criteria, for instance subjective well-being. Following from these findings, we discuss what these WLB scales could really measure and propose to broaden quantitative empirical approaches to it.

Keywords Work-life balance · European Social Survey

1 Introduction

The concept of work-life balance (hereafter WLB) has gained enormous attention in political institutions, companies, trade unions, families and individuals. WLB is now a priority on many political agendas. This is evidenced by the results of a search in

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Blackle,¹ which yields almost 1.8 million hits (related to all [de-industrializing] parts of the world) and we find governments, employers and employees' organizations involved in discussions about WLB.² Among the reasons for the topicality of WLB we find the increase of female employment, feminism, de-industrialization, higher unemployment among men, low-level (new) service jobs as well as an intensification of 'life' (see Crompton and Lyonette 2006; MacInnes 2006). Despite an apparently clear meaning of the concept—to combine work and life in a way that both are pursuable—there is some variety in meanings, origins and approaches to the concept which emphasize the aforementioned reasons to different degrees.

WLB is generally related to working time, flexibility, (un)employment, welfare, social security, family, fertility, migration, demographic changes, consumption, leisure time and so on (e.g. Dex and Bond 2005; Hardy and Adnett 2002; MacInnes 2006; Noor 2003; Smithson and Stokoe 2005). Research occupied with demographic trends (ageing, low fertility, migration), sustainable welfare provision and social security emphasize a structural component of WLB, whereas approaches referring to personal circumstances, family arrangements (care, gender roles) and well-being focus on the individual. That is, the individual's assessment of WLB includes some references to the family situation, household composition, breadwinner models, family size, and life plans turning this into a more comprehensive picture instead of an isolating and anomic approach to WLB. In this paper, our main interest shall be on survey research and how WLB is measured there. This means that we accentuate the view that WLB is the 'achievement' of an individual who combines various life domains in a successful and especially balanced way. In this vein, WLB is generally constructed via spill-over effects from either work onto family (work-to-family conflict) and/or family onto work (family-to-work conflict) in large-scale social surveys (e.g. Clarke et al. 2004; Crompton and Lyonette 2006; Noor 2003; Wallace 2005). Thus, surveys resemble an approach at the individual level; however, it is argued that strong implications for policy makers, employers and, last but not least, families and individuals arise from this.

This paper sets up a more critical analysis of WLB as it is used in large-scale survey research. There, we usually find a number of questions related to the combination of work and various domains of life in general. For instance, the European Social Survey (ESS) (Jowell et al. 2004/2005) emphasizes the balance of work and family life as in many other attempts to measure WLB. However, it seems that surveys put employment-related explanations of WLB to the foremost, while compromising on 'life'. In the majority of analyses of survey data, working conditions explain by far the largest part of the variation on the one hand. More important, some working conditions are explicitly presented as a clear threat to WLB. On the other hand, measures of WLB hardly covary with other components such as family (care) arrangements or diverse concepts related to alternative perspectives, such as the 'good life' (e.g. well-being). We would argue, however, that an accurate measure of WLB is sensitive to all aspects of life and work-related variation in WLB is only one aspect of it. Hence, our models include a variety of competing explanations of WLB. In addition, we relate WLB to external criteria of the good life. The results of these exercises will then be taken as the basis of an extended discussion and

¹ The search term was "work-life balance" used at www.blackle.com on 19 November 2007. Blackle is the allegedly environmentally friendly version of Google.

² Some examples are the European Union (DG Employment and Social Affairs), the European Foundation for the Improvement of Living and Working Conditions, the OECD, for UK philanthropic institutions see, for instance, the Work Foundation.

criticism of contemporary efforts to measure WLB in contemporary large-scale survey research.

2 Multiple Origins, Purposes and Meanings

Generally speaking, WLB is experienced when demands from the domain of (paid) work are compatible with demands from other domains, e.g. family or leisure time. Byrne (2005, p. 54) describes WLB in such a broad sense as ‘juggling five aspects of our lives at any one point in time: work, family, friends, health and spirit (or self)’. A ‘balanced’ living then occurs when activities and aspirations in one domain do not have negative effects on activities in the other ones. Many recent studies have, however, put emphasis on the relationship between work and (family) life and thus narrowed down the scope of what researchers of WLB are most interested in. For instance, research increasingly offers labour market relevant policy recommendations to increase WLB as public debates tend to focus on long working hours as the most likely threat to a balanced life (Fleetwood 2007). But WLB is further considered as a cause of other things, such as low fertility, population aging and their consequences (Dey 2006; MacInnes 2006). This further explains why policy makers are interested in WLB in order to discover ways in which the population matches the upcoming needs of the economy, the labour market (supply and demand), fiscal revenue, population growth and stability, and social security (welfare) both in the short run and the long run.

Other literature on WLB puts individual control and choice in the first place. Borrowing from individualization theory, the (partial) de-institutionalization of the family and the male breadwinner model has wide implications for WLB choices (Charles and Harris 2007). Social change has initiated the decline of institutional arrangements between the state, the economy and the family (or household) from the 1970s onwards. The male breadwinner model where men once had secured jobs and their wives cared for the children becomes less and less sustainable at least in the Western world. Feminist approaches to WLB emphasize an increased burden for women in employment, whilst gender roles and ethics of care remain rather stable concerning reproductive work in the household and care of children (Smithson and Stokoe 2005). Hardy and Adnett (2002) convincingly argue that ‘family-friendly’ employment policies, that is, leave from work, changes in work arrangements and practical help with care for family reasons, have not solved persisting gender inequality in European labour markets. They argue that this is largely because care ethics cannot compete with work ethics (see also Dey 2006; McDowell 2004; Williams 2001). Despite an overall decline in weekly working hours across Europe (including the UK) over the last decades (Bonney 2005; MacInnes 2006), increased levels of stress, competition and insecurities at the work place are considered additional factors relevant to a certain disruption of balance in life.

Important consequences of these shifts are deviations from previously determined life choices (over the life course). Thus, there is an often anticipated necessity to rearrange domestic arrangements. This then ‘contribute[s] to a situation where the choices that individuals make about their own WLB may be less predictable and less clearly gendered’ (Charles and Harris 2007, p. 292). Arguably, these changes might affect different people to different degrees. We could imagine that it is a particularly difficult situation for women with (young) children in paid work, suffering from a double burden and unequal opportunities both at home and work, whilst it might be easier for older people (whose children have already left the household), men, or single persons.

3 Survey Research on WLB

Large-scale survey research approaches WLB-related topics from various angles. Prominent features of WLB analysis include indicators of work-family fit and work-family balance (Clarke et al. 2004), work-to-family conflict, and family-to-work conflict (e.g. Crompton and Lyonette 2006; Noor 2003; Wallace 2005). Hence, in many applications we find a differentiation between two sorts of conflicts involved in establishing WLB or imbalance. On the one hand, work-to-family effects show how (unfavourable) working conditions exacerbate (family) life in general and care and intimacy demands in particular. This is often measured by how much (paid) work interferes with home/family life, how often it becomes necessary to adapt family life to the requirements of paid work, and to what extent strain from work makes it difficult to fulfil certain roles and obligations at home. On the other hand, there is also an interest in family-to-work conflicts as measured by the extent to which family responsibilities (e.g. care responsibilities) have (negative) impacts on work duties. Both concepts together are then considered to construct WLB. In some studies, people are (additionally) asked about the extent to which they can combine work and personal/family life (e.g. Clarke et al. 2004) offering an individual ultimate judgement on WLB.

It is thus fair to say that large-scale social surveys in general and cross-national social surveys in particular have achieved some ‘consensus’ about how to measure WLB. Examining two major and leading surveys, the International Social Survey Programme (ISSP) and the ESS, there is a great overlap in the way indicators of WLB have been worded. They capture the aforementioned dimensions and draw heavily from previous studies in the field (e.g. Kelloway et al. 1999; Netemeyer et al. 1996). In Table 1, we give a short description of the relevant question wordings.

Despite a somewhat different question wording, the underlying ideas about WLB in both surveys are very similar. WLB is threatened if people are too tired from work to do necessary things at home (or to enjoy things more generally), if they cannot perform according to their roles because of the time they spend on their job and if household or family responsibilities impede concentration at work. These indicators mark WLB as either related to strain-based (fatigue) or time-based conflicts between work and life (home, family). They refer to work-to-family conflict on the one hand, and to family-to-work conflict on the other. Taken together, they are considered as WLB in these surveys (see, for instance, Erikson et al. 2003).

Explanatory models of the causes of WLB suggest a variety of determinants: values, personality traits, work-related aspects (occupations, hours, working conditions), household-related aspects ([young] children, care, household tasks, cleaning), leisure time (activities) and others (for instance, Crooker et al. 2002; Noor 2003; Erikson et al. 2003). The main statistical explanations include gender, age, occupational class, care, working hours, work experience, working conditions (flexible hours, job demand and control) and spouse support. Main findings suggest that WLB is most closely associated with long working hours and working outside ‘normal hours’ (evenings, nights and weekends). These findings are important and stress the negative effects of extended working hours as well as additional burdens of child care and housework (especially for women). However, when looking at the question wordings in Table 1, we are hardly surprised about many of the explanations of WLB. For instance, that people come home from work too tired to do other things is most probably caused by exhausting work and that can be long and irregular working hours or high job demands. Because of the particular wording of the questions, it seems that explanations are already given in the measurement of WLB itself. Other findings are that gender, age and occupational differences exist to the degree that women

Table 1 Indicators of WLB in the ISSP and ESS

Question	Answer categories
ISSP	
<i>How often has each of the following happened to you during the past three months...</i>	
I have come home from work too tired to do the chores which need to be done?	• Several times a week (1)
It has been difficult for me to fulfil my family responsibility because of the amount of time I spend on my job?	• Several times a month (2)
I have arrived at work too tired to function well because of the household work I had done?	• Once or twice (3)
I have found it difficult to concentrate at work because of my family responsibilities?	• Never (4)
	• (doesn't apply/no job)
ESS	
<i>(A) Using this card, how often do you...</i>	
1. ... keep worrying about work problems when you are not working? ('worrying')	• Never (1)
	• Hardly ever (2)
2. ... feel too tired after work to enjoy the things you would like to do at home? ('too tired')	• Sometimes (3)
	• Often (4)
3. ... find that your job prevents you from giving the time you want to your partner or family? ('prevents')	• Always (5)
	• (no partner/family)
<i>(B) How often do you ...</i>	
4. ... find that your partner or family gets fed up with the pressure of your job? ('fed up')	
5. ... find it difficult to concentrate on work because of your family responsibilities? ('concentrate')	

(in full-time employment) report higher levels of WLB, younger people experience higher levels of conflict and people in professional and managerial positions achieve lower levels of WLB (e.g. Crompton and Lyonette 2006; Dex and Bond 2005). In the remainder of this article, we illustrate and critically comment on these findings using data from the ESS II.

Large-scale surveys most definitely play an important role in contemporary social science. Nevertheless, we should be aware that there are also small-scale (partly non-representative) surveys as well as more qualitative studies dealing with WLB in varying depth (e.g. Hyman et al. 2005; Noor 2003; The 24/7 Survey n.d.). Some authors have used a 22-item scale to differentiate between various forms (time-based; strain-based) of work-to-family and family-to-work conflicts (e.g. Kelloway et al. 1999; Noor 2003). Whilst these measures tackle the issues at hand from a slightly different perspective, they apply the same conceptual underpinnings to the study of WLB. Qualitative research, such as the one by Hyman et al. (2005), often investigates the nature of the boundaries between work and home (family). This highlights the often problematic distinction between work and home, which cannot be upheld in all situations (e.g. shift work, work on short notice...) and thereby negatively impacts on subjective feelings of balance.

This short review highlights multiple associations and purposes with respect to WLB. Empirical quantitative social research has particularly highlighted work-related strains and time conflicts with respect to WLB. We mainly find two conflicting areas: first, how work impacts on family life and, second, how family life impacts on work. But this strand of research also contributes to explanations about gendered aspects of WLB covering care and reproductive housework. Research targets the level of conflicts for men and women in various situations (with/without young children; in employment or not, sharing household

and care responsibilities...). By applying this kind of research, important conclusions can be drawn on the causes and consequences of fertility and employment decisions of women and men. In this vein, we examine the application of WLB in a particular kind of empirical research. We use large-scale European survey research and critically explore their contribution to WLB. This line of investigation has gained much attention in the social sciences over the last years. Large-scale surveys are more and more used to provide policy makers with recommendations about current trends and their implications for the future. We observe a growing consensus in large-scale survey research about how to measure and analyse matters of WLB. Indeed, it is intriguing how similar different surveys approach the measurement of WLB-related issues. However, there are some alternatives available. We have briefly outlined a selection of analytical frameworks of small-scale studies in order to be able to put large-scale survey research into a wider context.

4 The European Social Survey II

In its second round, the ESS includes a module on family, work, wellbeing and WLB (Erikson et al. 2003). The ESS II is an academically-driven multi-country survey covering 25 European nation-states. It involves strict random probability samples of individuals, a minimum target response rate of 70% as well as rigorous translation protocols. One module in the hour-long questionnaire incorporated more than 100 questions on WLB-related issues, amongst them many indicators concerning the job, the household and childcare. In comparison to other surveys, for instance the European Quality of Life Survey (EQLS) 2003, the ESS II included five indicators tackling work-life (im)balance enabling tests of the measurement qualities of the WLB concept to a greater extent. The questions (Table 1) were posed only to people in paid work, which led to a significant reduction in the actual sample sizes available for analysis ($N = 16,860$). Respondents (only one from each selected household) could choose from basically five answers ranging from 'never' (1) to 'always' (5). Thus, in the following high scores indicate work-life imbalance.³ Note the limitation to ask only people in paid work. This demonstrates a certain bias towards the concept of work. It follows that only paid work is considered as relevant to the study of work-life conflicts whilst unpaid and voluntary work is irrelevant for this approach. In total, the available measures allow us to conceive of WLB as including work-to-family and family-to-work pressures. This demonstrates a comprehensive understanding of issues related to WLB. Whilst some authors differentiate between both aspects and propose separate analyses, we will not be able to find this structure in our data at hand (see further below).

To start with, we present descriptive statistics and bivariate correlations. In a next step we create a scale based on findings from factor analysis, using Maximum Likelihood extraction and reliability analysis. This shows the extent to which all five indicators could define a common dimension, which we would subsequently label WLB. Based on these results we use this WLB scale as the dependent variable in hierarchical linear models (multilevel models). These models account for the nested (clustered) data structure, as individuals reside in countries. However, because of a rather limited number of countries

³ Hence, higher scores indicate imbalance rather than balance of work and life. We deliberately depart from the common practice that higher scores of an index/scale indicate positive outcomes to emphasize the nature of WLB. This highlights the important fact that researchers are usually interested in the causes of imbalance rather than balance. Needless to say, this coding has no effects on the result apart from the circumstance that positive associations with WLB indicate causes of imbalance.

(25), we only include a random intercept to account for potentially different means across countries.⁴ Random effects, i.e. the possibility that different independent variables have a different effect on WLB in different countries, are not considered because of statistical reasons.⁵ Besides, we are not particularly interested in these potential effects in this research. The hierarchical linear model then includes various potential explanatory variables, covering socio-demographics, household-related and work-related aspects at the individual level. Concerning the latter two, we further distinguish between objective and subjective indicators. In particular, this differentiation helps evaluate the impact of work and care responsibilities on WLB. The list of variables used and a basic description of them can be found in Table A1 in the Appendix.

5 Findings Descriptives

Table 2 presents descriptive findings concerning all five indicators of WLB. People most often report that they are too tired after work to enjoy the things they like to do at home (mean of 2.9 on the five-point scale). The least often it occurs that they cannot concentrate at work because of their family responsibilities (mean of 1.8). Examining correlations, we find substantial covariation between all indicators. However, ‘to worry about work when not working’ (‘worrying’) displays the most modest covariation with the other four variables. We can see that family-related questions (‘prevents time’ and ‘partner/family fed up’) correlated the most highly (0.56) and thus strongly determine the measurement of WLB.

We run a factor analysis to determine the dimensionality of the five indicators. From previous research we could expect a difference between work-to-family conflicts and family-to-work conflicts but the rather low number of indicators makes it more likely that only one common dimension, i.e. WLB, is extracted. In addition, the high correlation of 0.46 between the indicators ‘partner fed up’ and ‘concentrate at work’ also show that work-to-family conflicts are not that clearly separable from family-to-work conflicts as each spill-over onto the other. More detailed results from factor analysis can be found in Table 3. First, the data are suitable for factor analysis as shown by a KMO of 0.78. Second, only one common factor is extracted according to the Eigenvalue criterion.⁶ This dimension explains 40% of the variation in all five indicators. Factor loadings are all significant; however, the loading of ‘worrying’ (0.45) does not exceed a commonly agreed threshold of 0.5. We can also see from Table 3 that uniqueness is largest for this indicator. Eighty percent of the variation in ‘worrying’ remains unaccounted for in the factor analysis. In addition, reliability analysis shows that Cronbach’s α slightly increases from 0.75

⁴ This is a reasonable limitation to the data as it cannot be assumed that a common measurement of WLB exhibits metric and/or scalar equivalence across countries. Our attempts to find such measurement models failed to the extent that only a measurement model of WLB including three indicators (‘worry’, ‘tired’ and ‘prevents time’) exhibited metric but not scalar equivalence (results are available from the author upon request). Because structural equation modelling (SEM) would conclude that measures cannot be compared across countries and thus terminate the analysis, we note to be cautious about substantial interpretations of country means using different methods. Differences in the mean can thus also be related to bias and error instead of merely substantial differences in WLB across countries.

⁵ See specifically a lively discussion in the multilevel list at <http://www.cmm.bristol.ac.uk/learning-training/multilevel-m-support/jisc.shtml>.

⁶ Factor analysis supports our theoretical assumption that all five items of WLB are related to one, and only one common dimension. The first Eigen value is equal to 2.55; the second Eigen value is smaller than 1 (0.80) and thus not extracted.

Table 2 Descriptive statistics of five WLB indicators

Indicators	<i>N</i>	Means	SD	Correlations					
Worrying	19,025	2.71	1.19	1.00					
Too tired	19,040	2.91	1.03	0.32	1.00				
Prevents time	17,693	2.65	1.15	0.32	0.52	1.00			
Partner/family fed up	17,015	2.07	1.07	0.33	0.39	0.56	1.00		
Concentrate at work	17,164	1.82	0.87	0.23	0.30	0.37	0.46	1.00	

SD = standard deviations

All bivariate correlations are statistically significant at the 1% level ($p < 0.01$)

In spite of the indicators having ordinal level, we present Pearson correlations because we have compared them to other coefficients of associations (Kendall's Tau b and Spearman's Rho) and concluded that different correlation coefficients yield very similar results. In further analysis, we will also assume interval scale level rather than sticking to ordinal scales

Source: ESS II, pooled sample, weighted by design and population sizes

Table 3 Dimensionality of WLB in the ESS

Indicators	Loadings (λ)	Uniqueness
Worry	0.45	0.80
Too tired	0.62	0.61
Prevents time	0.77	0.41
Partner/family fed up	0.72	0.48
Concentrate at work	0.53	0.72

Results from factor analysis, Factor loadings and uniqueness

Maximum Likelihood Factor Analysis: KMO = 0.78, 40% of variation explained by one factor. Only one factor extracted because of Eigen values larger than 1 (2.55)

Source: ESS II (2004–2005), pooled data, weighted by design and population sizes

using all five indicators to 0.76 when leaving out 'worrying'. In short, 'worrying' does not add anything more to the common dimension than already captured by the remaining four indicators. Hence, we can leave out 'worrying' in further analyses.

These results suggest using a common scale including four indicators: 'too tired', 'prevents time', 'partner/family fed up' and 'difficult to concentrate'. In other words, data from the ESS do not support the clear conceptual distinction between family-to-work conflicts on the one hand and work-to-family conflicts on the other. Instead, ESS measure one common construct, which is used as a measure of WLB in this (and most other) research. In the following, we use this scale to explore the determinants of WLB. The common scale ranges from 1 to 4, where 1 indicates four 'never responses' and 4 indicates four 'always' responses to WLB. Thus, high values refer to an imbalance between work and life. The scale has a mean of 2.36 and a standard deviation of 0.78 (see Table A1). In total, 16,860 respondents have answered all four indicators and represent the sample used in further analysis.

6 Explaining WLB

To explain differences in WLB, we refer to subjective and objective factors in the areas of the job and the household. As for household-related aspects, we use breadwinner models

(partner is also working or not), presence of children of specific ages in the household, main type of childcare (for the youngest child) and hours spent on housework as objective criteria. Subjective household-related aspects then are economic strain, amount of housework, time flexibility concerning housework and stressful housework. To include household-related explanations into the models prior to work-related aspects is a favour to explanations in the realm of the household.⁷

We further include indicators of normal weekly working hours, occurrences of evening and weekend work, and working overtime on short notice (work-related objective factors). Subjective work-related factors contributing to WLB are defined as perceived job security, effort-dependent salaries, time flexibility, hard work and heavy work loads. We control for socio-demographic variables such as gender, age, education, and occupational class. For the description of explanatory variables see Table A1.

Socio-demographic characteristics explain approximately 2% of the variation in WLB (Table 4). We find that women report higher levels of work-life imbalance than men (0.09). One additional year of age decreases WLB, though the effect is smaller than 0.00. The highest level of education also impacts on WLB, though to a minor extent. A similar observation is made for occupational class according to Goldthorpe's class schema. WLB is more at risk among the highest classes (professionals and managers) than among middle and lower classes.

Objective household criteria explain only 2% of the variation in WLB. We find that singles are generally more balanced (-0.07) than people whose partner is in paid work. The most interesting finding concerning the household is that having small children does not have an effect on WLB for men everything else being equal. However, women with children aged three to five (0.10) and children aged six to 11 (0.05) report slightly higher levels of imbalance. Interestingly, people with children under the age of three are as good (or bad) off in terms of WLB than people without children under 12 living in the household (reference). Child care arrangements (for the youngest child under 12) show that WLB is worst for those who (have to) arrange formal care or informal care through the extended family instead of looking after the child by themselves. In terms of household work, doing housework during the week increases WLB and doing it during the weekend decreases WLB. In this respect, WLB seems most threatened if there is no time during the week to do housework because of other responsibilities. There are no gender differences supported by this analysis.

Subjective household conditions explain 6% of the variation. Subjective economic strain, i.e. the evaluation whether the available financial resources guarantee a comfortable standard of living, differentiates quite clearly with respect to WLB. The more difficult it is to get by, the higher the level of work-life imbalance. Other perceptions, such as an overload of household work, the lack of flexibility concerning schedules of housework, and the level of perceived stress in household-related tasks contribute significantly to the explanation of WLB, without being gender-related apart from 'housework overload' (0.02).

However, by far the most powerful predictors of WLB are work-related objective criteria such as working hours and working outside 'normal hours' (evenings, weekend, and working overtime on short notice). On top of household conditions, they explain another

⁷ Because variation in WLB is first explained by household-related aspects, the remaining indicators can only capture what is not explained away so far. We have alternated the order of inclusions of blocks of variables in the model and conclude that this order matters. Inserting work-related aspects prior to the household explanations almost renders household-related explanations redundant. In the presented model, we prioritize household-related explanations because our criticism later on will particularly focus on the low relevance of the household for WLB when considering the available measures.

Table 4 Explanations of WLB

Parameters	Coefficient	SE	<i>p</i> -value
Intercept	1.07	0.06	***
<i>Socio-demographics (explains 2%)</i>			
Female	0.09	0.04	**
Age (41)	<0.01	<0.01	***
Education (upper secondary)			
Not completed primary education	-0.05	0.04	
Primary or first stage of basic	-0.04	0.03	
Lower secondary or second stage of basic	0.01	0.02	
Post secondary, non-tertiary	-0.07	0.02	***
First stage of tertiary	0.05	0.02	**
Second stage of tertiary	-0.04	0.03	
Occupational class (II Professional and managers, lower grade)			
I Professionals and managers, higher grade	0.05	0.02	***
IIIa Routine nonmanual employees, higher grade	-0.13	0.02	***
IIIb Routine nonmanual employees, lower grade	-0.04	0.02	*
IVac Small employers and proprietors (including farmers)	-0.14	0.03	***
IVb Self-employed workers	-0.10	0.04	***
V Technicians and supervisors of manual workers	-0.01	0.03	
VI Skilled manual workers	-0.11	0.02	***
VII Nonskilled manual workers	-0.11	0.02	***
Other, not classified	0.01	0.06	
<i>Objective household (explains 2%)</i>			
Household type (partner is full-time employed)			
Single household: no partner	-0.07	0.02	***
Partner is not working	0.03	0.02	*
Partner is part-time	0.07	0.02	***
Children (no under 12)			
Under 3	0.00	0.03	
Between 3 and 5	-0.01	0.03	
Between 6 and 11	-0.03	0.02	
Female and children			
Under 3	0.03	0.04	
Between 3 and 5	0.10	0.04	***
Between 6 and 11	0.05	0.03	*
Main childcare (Household member)			
Na (no child under 12)	-0.03	0.03	
Child manages alone	0.01	0.05	
Extended family/ex-partner	0.08	0.02	***
Formal care (paid or unpaid) by minder (carer, nursery)	0.08	0.03	***
Other	-0.11	0.07	*
Housework hours (weekday)	-0.02	0.01	**
Housework hours (weekend)	0.01	0.01	**
Female and housework			
Housework hours (weekday)	0.00	0.01	
Housework hours (weekend)	-0.01	0.01	

Table 4 continued

Parameters	Coefficient	SE	<i>p</i> -value
<i>Subjective household (explains 6%)</i>			
Economic strain (live comfortably)			
Very difficult	0.29	0.03	***
Difficult	0.20	0.02	***
Coping	0.10	0.02	***
Housework overload	0.08	0.01	***
Housework inflexibility	0.05	0.01	***
Stressful housework	0.08	0.01	***
Female and housework			
Housework overload	0.02	0.01	**
Housework inflexibility	-0.01	0.01	
Stressful housework	0.00	0.01	
<i>Objective work (explains 14%)</i>			
Parttime	-0.19	0.03	***
Working hours (40)	0.01	0.00	***
Working evenings/nights	0.03	0.00	***
Working weekends	0.06	0.01	***
Working overtime	0.08	0.00	***
Female and work			
Parttime	-0.06	0.04	
Working hours	0.00	0.00	
Working Evenings/Nights	0.01	0.01	
Working weekends	-0.02	0.01	***
Working overtime	0.00	0.01	
<i>Subjective work (explains 3%)</i>			
Job insecurity	0.04	0.01	***
Effort-dependent salary	0.02	0.01	***
Time inflexibility	0.03	0.01	***
Hard work	0.09	0.01	***
Work overload	0.09	0.01	***

Non-standardized regression coefficients, standard errors and significance from multilevel models

Dependent variable: WLB. Random intercept hierarchical linear model. Robust standard errors for clustered data. Explanatory variables are entered blockwise in a stepwise procedure. Missing values dummied out
 Variance partition in the final (empty) model. At individual level 0.4477 (0.6186); at country level 0.0156 (0.0180). The empty model suggests that the proportion of variance found at the individual level is equal to 0.97. This leaves only 3% of the variation in WLB at the country level

Total explanatory power at the individual level: 27%. Total explanatory power at the country level: 13%. In the blockwise entries, socio-demographics explain 2% of the variation in WLB in the first place. Second, objective Household criteria additionally explain 2%. Third, subjective household criteria add 6% of explained variance. Forth, objective work indicators explain another 14%, and fifth, subjective work-related indicators explain 3% on top of all other causes

Deviance of the final (empty) model: 29,821 (34,062); AIC of the final (empty) model: 29,825 (34,066); BIC of the final (empty) model: 29,840 (34,081)

*** *p* < 0.01; ** *p* < 0.05; * *p* < 0.10

Source: the ESS II (2004–2005), pooled data, weighted by design and population size

14% of the variation in WLB. The results indicate that part-timers experience much lower levels of work-life imbalance (-0.19) than full-time workers. Women in part-time work experience even better WLB as indicated by a negative interaction term of -0.06 . The longer the working hours (in full-time paid work), the higher is their imbalance in work and life. One additional working hour per week increases imbalance by 0.01 and working evenings, weekends or overtime on short notice are severe causes of a disruption of WLB. In particular, unexpected overtime decreases the level of WLB enormously (0.08), though evening and weekend work also contribute considerably to the imbalance between work and life where weekend work is less threatening for women (-0.02) than for men.

Finally, work-related subjective aspects also contribute to the explanation of WLB. Three percent can be additionally explained by perceptions of job (in)security (0.04), an effort-dependent wage or salary (0.02), time (in)flexibility (0.03), a hard job (0.09) and a heavy work (over)load (0.09). Especially those people who report very high levels of job insecurity, a lack of power in deciding when to start or finish work and demanding jobs (hard work) miss out on WLB.

Despite the large explanatory power of the model (27% of the variation are explained), these findings are not necessarily surprising. Work-related explanations, especially working hours, timing as well as working conditions clearly indicate the strong link between WLB and work. What was surprising, however, is the finding that household-related aspects only contribute very little to the overall explanation of WLB. Although we prioritized them as explanations,⁸ it is especially the objective household-related aspects which provide hardly any explanations. It occurs that very small children do not make a difference everything else being equal (even in the stepwise enlargement of the model, small children under the age of three never had a significant effect on WLB). In the remainder of this contribution, we present the argument that the current effort to measure WLB is likely to 'favour' work-related explanations and partly neglects the 'life' component of WLB. Moreover, we suggest that WLB cannot be achieved by adjusting work life only. Second, the wording of the indicators prioritized work-related explanations by considering work as the (main) cause of WLB due to a particular question design from the very beginning. This is not true, at least not to the same extent, for household-related conditions. Finally, an additional analysis will reveal only little covariation with other constructs in close connection to WLB, such as well-being, life satisfaction or happiness. This partial lack of criterion validity suggests that the measure of WLB is one-sided to a great extent and captures—above all—work-related aspects without acknowledging the more complex mechanisms involved in WLB.

7 Discussion

To begin with, we want to discuss the indicators of WLB from the ESS II in more detail. This discussion basically stretches to other attempts to measure WLB in survey research as indicators are surprisingly similar across a larger number of studies. Our first criticism is based on a narrow perspective on 'work' and a dissatisfactory content specification of the domain of 'life'. On the one hand, the ESS only considers 'paid work' as relevant to research on WLB. However, one could argue that unemployed people particularly suffer from an imbalanced live. It is well known that unemployment spills over on 'life' in many negative ways. Furthermore, 'voluntary work' or 'care work' is not included here either, which

⁸ Less favourable models showed that household-related aspects explain <6% in total, with objective conditions explaining just 1%.

narrows the scope of any analysis using this kind of data. In other words, this suggests that contemporary large-scale survey research such as the ESS (but also the ISSP or the EQLS) largely neglects WLB issues of those outside the labour market. On the other hand, we have to acknowledge that the definition of 'life' has to remain open to a certain degree because its components and specifics vary to a great extent over the life course, between individuals and countries. But, as Collins argues, thinking about 'life' aspects such as cleaning, but also care work 'highlights gendered and class-based presuppositions, and draws attention to the role of the welfare state in shaping interactions between home and work and the ability of citizens to move between home and work' (2007, p. 416). Current measurements do not account for this, instead they partly put 'life' into a black box: life means everything else than work, from cleaning, care work, leisure, family, to social life. This can be clearly seen in the ESS' attempt to operationalize WLB. 'Life' is either said to be 'when *not working*' (indicator 1), 'enjoy the things you want to do at home' (indicator 2), 'giving *time* you want to *your partner or family*' (indicator 3), 'partner or family' (indicator 4) and 'family responsibilities' (indicator 5). The references to 'life' are very general and leave much space to adapt to the personal environment of the respondent. By this broadness, the variety of 'life' aspects in different households and among individuals might be captured, but as we will argue, it comes at the expense of other things. As a solution to this, one might consider going back to Byrne's (2005) five-fold conceptualization of WLB and rethink more precise measures capturing the degree to which every one of the five domains can be satisfied. This would then make it necessary to consider 'life' in more detail and, as it is the case with work, be more specific about the various domain-specific meanings of life in research on WLB.

7.1 Criticism 1: Abstract Measurement

One of the greatest concerns in survey research in general and in the ESS in particular is measurement equivalence, i.e. finding out about statistical equivalence of indicators and equal measurement properties across groups and/or countries (e.g. Steenkamp and Baumgartner 1998). It is a very important aim of survey research to achieve high-quality measures of many constructs in order to meaningfully compare them across and within countries. Enormous efforts in all phases of the ESS survey design (questionnaire design, translation, implementation, sampling, survey, interview...) are made to design measures as equivalent as possible. These precautions bear fruits in many research fields; for instance, Reeskens and Hooghe (2008) have shown this for a scale of generalised trust.

Given the particularities of 'life' in different national contexts as well as different within-country settings, establishing measurement equivalence of WLB seems rather difficult at the first glance. For the concept at hand, we found such equivalence (metric invariance) only for a subscale of WLB.⁹ Hence, these efforts have certainly paid off to the extent that indicators are (at least in their relationships, if not means) comparable across countries. Yet, in cross-national research, equivalence comes at a cost. Because of national and cultural differences,

⁹ For a short scale of WLB, including the indicators 'worrying', 'too tired' and 'prevents time', we have found metric invariance across all participating countries. Using multi-group confirmatory factor analysis (MGCF) in LISREL, we find that the metric invariance model yields acceptable fit ($\chi^2 = 277.44$; $df = 48$, p -value < 0.001, RMSEA = 0.063 and NFI = 0.986). Though the χ^2 value is significant, RMSEA and NFI are below the thresholds for rejection. This short WLB scale exhibits high loadings on all three indicators (0.55 on 'worrying', 0.79 on 'too tired' and 0.73 on 'prevents time'). We have also run the analysis with this short version, but we decided against it because it was even 'less favourable' to household-related explanations of WLB. On the other hand, alternative statistical analyses have shown that 'worrying' does not fit other WLB indicators to the same extent.

establishing equivalence can often be equated with a ‘more abstract’ measurement. A more abstract measurement has the advantage that country differences might disappear and thus equivalent measurement is possible. However, more abstract measures also carry less meaning. The more general a concept, the less likely it is to differentiate between standings of subgroups of the population. In the present measurement of WLB we can contrast these equivalence aims with the aim of establishing a relevant measurement of WLB. The general idea about the domain of ‘life’ certainly increases the abstractness of the whole measurement. ‘When not working’, ‘at home’, ‘family responsibilities’ and so on refer to general aspects and do not tackle what is specifically relevant for the respondent on the one hand and policy oriented research (responsibilities towards child care, fertility) on the other. In this vein, everybody has things to do at home but according to what these things are WLB might be more or less at risk. It most certainly makes a crucial difference if ‘enjoy the things to do at home’ refers to watching TV (for a single person) or ‘playing with two children in the late afternoon’ (for a mother or father of two young children). Whilst it is more difficult to imagine that someone is too tired to watch TV (though it might be possible in extreme situations), it is more straightforward to acknowledge to be too tired to do physical exercise and, most clearly, it does not take much to be too tired to play with children, especially after a long and exhausting working day. Furthermore, family responsibilities cover a variety of things, including care (not only for children, but also for elderly parents, for instance), participation in activities, and so on depending on the actual family arrangements. By using a more abstract conceptualisation of ‘life’, we lose these and similar emic dimensions of WLB. In a nutshell, the shortcoming in the specification of the concept of life in WLB might (a) be necessary, but only to a certain extent, and (b) more important to establish equivalence than make substantive claims about WLB. However, by following these pieces of advice we arrive at a very abstract measure of WLB and explanations referring to the ‘life’ side such as household-related aspects cannot account for much of the variation. We believe that our results support this line of criticism. For future research, one could think of clarifying the meanings of various ‘life’ aspects. If we manage to somewhat standardize measures to refer to more specific life situations shared across various countries, we could find a better solution to these problems.

7.2 Criticism 2: Mixing Cause and Effect

Second, it can be highlighted that the indicators of WLB already refer to the most probable causes of WLB. The wordings strongly suggest that work-related aspects are the main explanation of variation in WLB in subsequent analysis. A causal relationship between work and life is established in four out of five indicators. Whether it is ‘*work problems*’ (indicator 1), ‘*too tired from work*’ (indicator 2), ‘*the job prevents*’ (indicator 3), or ‘*pressure of your job*’ (indicator 4), in all these phrases it is most obvious that reasons for WLB are found in work-related aspects. Further to this, why one is ‘too tired after work’ or that ‘the job prevents from giving time’ is most apparently related to (a) long working hours, (b) late working hours (evenings, overtime) or (c) hard (physically and/or intellectually demanding) work. There is a limited set of reasons why work is tiring and to give explanations already in the measurement of the effect, as we believe is done here, renders the argument circular and tautological. That long working hours and hard work make tired, prevent from giving time to other activities in general and family and partner in particular, as well as that they create some pressures construe obvious reasons for WLB. Findings such as ‘working hours were the most significant predictor of work-life conflict’ (Crompton and Lyonette 2006, p. 385) are thus not surprising. In fact, one does not need

sophisticated statistical models to reveal these causes as they are already well integrated in the measurement of WLB as the dependent concept.

Labour market oriented policy recommendations are thus the most likely to emerge from this research, whereas family-oriented and fertility-oriented conclusions can be hardly drawn. It is clearly shown how work relations impact on WLB, whereas other causes only play a marginal role. Arguments found in feminist research about the necessity to share housework-related tasks among men and women cannot draw on this research either as the impact of additional household work is marginal and, when accounting for interaction effects between gender and hours spent on housework, provides evidence of the contrary, i.e. that women are equally well off in terms of WLB even when doing more housework (after controlling for working hours).

These shortcomings could be easily remedied. Instead of putting the cause of work-life imbalance already in the question wording, one could formulate questions in a more neutral way. For instance, instead of asking 'how often it occurs that the job prevents one from giving time to the partner or family', one could ask 'how often the respondent has the feeling that he or she cannot devote enough time to these people'. Here, the explanation (working hours) would be at least removed from the wording and respondents would be encouraged to think of many reasons and not only work-related ones. Then, the finding that 'long working hours prevent people from giving time' would not be circular either. Simple changes like these could make research on WLB using large-scale surveys more interesting and challenging.

7.3 Criticism 3: Correlates of WLB

Our third objection concerns the criterion validity of the measure itself. From the literature it is clear that WLB is closely associated with measures of well-being (e.g. Hill 2005; Noor 2003, Erikson et al. 2003). A balanced life is regarded as a good life (Hildebrandt and Littig 2006) in both commonsense and scientific approaches. People who combine all aspects of their life in a balanced manner should therefore be the most satisfied, the happiest and the ones who have pleasant feelings more often than others. In short, WLB is part of the general well-being. WLB measurements should thus correlate strongly with these external criteria. Because all the measured aspects are 'subjective' to a great extent, there is another reason why we believe that correlations should be high.

In the ESS we find indicators of life satisfaction,¹⁰ happiness,¹¹ subjective health¹² and a battery of feelings measuring emotional well-being.¹³ Most of the criteria variables are single measures; however, feelings of emotional well-being are part of an item battery. For the latter, factor and scale analyses indicate a good fit of a uni-dimensional scale of

¹⁰ Wording of life satisfaction: 'All things considered, how satisfied are you with your life as a whole nowadays? Please answer using this card, where 0 means extremely dissatisfied and 10 means extremely satisfied?'

¹¹ Wording of happiness: 'Taking all things together, how happy would you say you are? Please use this card.' 11-point scale of 00 'extremely unhappy' to 10 'extremely happy'.

¹² Wording of subjective health: 'How is your health in general? Would you say it is...very good (1), good (2), fair (3), bad (4) or, very bad (5)?'

¹³ Wording of feelings: 'Firstly, I am going to read out a list of statements about how you may have been feeling recently. For each statement, using this card, I would like you to say how often you have felt like this over the last two weeks. Please use this card: 1) I have felt cheerful and in good spirits. 2) I have felt calm and relaxed. 3) I have felt active and vigorous. 4) I have woken up feeling fresh and rested. 5) My daily life has been filled with things that interest me. 6-point answer scales from 1 'all of the time', 2 'most of the time', 3 'more than half of the time', 4 'less than half of the time', 5 'some of the time' to 6 'at no time'.

Table 5 Bivariate associations between WLB and relevant external measures of ‘the good life’

Correlations		1	2	3	4	5
1	WLB	1	-0.15	-0.14	0.09	0.25
2	Life satisfaction	-0.15	1	0.67	-0.31	-0.36
3	Happiness	-0.15	0.68	1	-0.30	-0.37
4	Subjective health	0.10	-0.33	-0.33	1	0.35
5	Emotional well-being	0.25	-0.39	-0.41	0.38	1

Pearson correlations below diagonal, Spearman’s Rho above the diagonal

All correlation coefficients are statistically significant ($p < 0.01$). $N \sim 16,800$

Correlations between WLB and a single criterion of the good life remain constant when we control for alternative external criteria

Source: the ESS II (2004–2005), pooled data, weighted by design and population sizes

emotional well-being.¹⁴ Descriptive statistics of these indicators are: (1) life satisfaction has a mean of 6.56 and a standard deviation of 2.47; (2) happiness has a mean of 7.01 and a SD of 2.12; (3) subjective health has a mean of 2.31 and a SD of 0.92, (4) emotional well-being has a mean 3.04 and a SD of 1.09.

Table 5 addresses bivariate correlations between these constructs and our WLB scale. Because high values of the WLB scale point towards imbalance, we expect negative correlations with life satisfaction and happiness, and positive correlations with subjective health and feelings.

Correlations between WLB and all remaining four measures of ‘a good life’ are the smallest of all observed correlations. They range from 0.10 to 0.25. As expected, the higher work-life imbalance, the lower are life satisfaction, happiness, subjective health and emotional well-being. Correlation coefficients of 0.25 (absolute value) or below can hardly be considered substantial covariates. A correlation of 0.10 (between health and WLB) could be interpreted in a way that WLB explains approximately 1% of subjective health. Only the correlation between WLB and emotional well-being indicates that WLB can explain up to 6% of emotional well-being. In short, we believe that these correlation coefficients are disappointingly small especially when we take into account that bivariate correlations between the four remaining constructs range from 0.33 to 0.68 (in absolute values). Following from that, we understand that WLB is a rather weak component of ‘the good life’ as captured by the total of the five measurements. This picture does not change if we control for the other components in a multivariate setting (first-order correlations instead of zero-order ones).

From the literature we could have expected that WLB is a core component of the good life but the proposed measurement in the ESS does not support this interpretation. In measurement-theoretical terms, this finding indicates a poor criterion validity as the measurement does not reveal associations with other relevant and similar constructs. Future research should thus

¹⁴ The factor analysis of five feelings shows one common dimension of emotional well-being. All five indicators are (highly) correlated (Pearson correlations between 0.41 and 0.61) and factor analysis using the ML algorithm confirms adequacy of the one-dimensionality by a KMO of 0.84. Only one Eigen value is larger than 1 (3.10) whilst the second Eigen value is equal to 0.59. Emotional well-being explains 52.8% of the variation and loadings vary from 0.66 (‘my daily life has been filled with things that interest me’) to 0.80 (‘I have felt cheerful and in good spirits’). Cronbach’s α equals 0.84 and cannot be increased by deleting one of the indicators. Following from this, we constructed a scale of well-being including all five feelings. This scale ranges from 1 ‘high emotional well-being’ to 6 ‘low emotional well-being’. The scale has a means of 3.04 and a standard deviation of 1.09.

scrutinize the meaning and importance of WLB in more detail. What can we say about the balanced or imbalanced life if research supports only a weak link to more general measures of the good life? We simply cannot believe nor accept that WLB is almost irrelevant to the good life. Instead, we would argue that imbalance is one of the major causes of dissatisfaction, lack of happiness and emotional well-being. If people have the feeling to miss out on certain aspects of their lives, which arguably should be the case with an imbalanced life, they should report lower levels of subjective well-being. If they do not, something must be wrong. Although it could be a theoretical misspecification on our part, we rather believe that there is something wrong with the measurement at this stage. Hence, future research should provide more information about the extent to which these conflicts impact on broader measures of subjective quality of life.

8 Conclusions

WLB features prominently in policy debates concerning the needs of a globalized and de-industrialized economy (flexibility), female employment, feminism, fertility and population ageing. Analyses of empirical data support claims that work often impacts on life in a negative way. Large-scale social surveys such as the ISSP and the ESS have settled with a limited number of indicators to facilitate cross-national comparisons. We have argued that this (partly necessary) achievement of uniformity in these measures, i.e. measurement invariance, comes at the expense of the usefulness of the concept. Because the 'life' component remains unspecified to a great extent, large-scales surveys produce rather general measures of WLB, which are more often than not favourable to employment-related explanations. This approach, however, fails to acknowledge the wider applicability of WLB. A more specific separation of WLB into a work-to-family conflict on the one hand and a family-to-work conflict on the other does not offer a solution to these problems. Instead, current measurements of WLB appear to 'whitewash' the difficulties to combine work and (family) life to a considerable extent. Our analyses have shown that household-related aspects, especially the presence of small children, contribute little to the explanation of WLB. Contrary to our expectations, current measurements of WLB can hardly establish a contribution to explanations concerning (subjective) quality of life. These findings, amongst others, are disappointing in respect to some of the contexts in which WLB is discussed.

In order to overcome the current shortcoming in measuring WLB in large-scale surveys, we propose to concentrate on a more 'work-neutral' measurement of WLB. Instead of asking whether work has made it impossible to fulfil other roles or activities, surveys could ask whether respondents can combine various aspects of their lives in a satisfactory manner. In this respect, 'life balance' could be associated with the realization of several life domains (where work is one of them, see also Byrne 2005) and it could be examined to what extent work endangers a balanced life. Interestingly, the third wave of the ESS (2006/2007) includes one indicator following this line of thought. Respondents have been asked 'How satisfied are you with the balance between the time you spend on your paid work and the time you spend on other aspects of your life?' Whereas the 'life' component still remains unspecified, paid work is not so obviously set up as a cause of work-life imbalance in the measurement of (satisfaction with) WLB. Alternatively, one could aspire to measure conflict within the family independently from work-related aspects and vice versa. Additional efforts could also include more specific references to particular aspects of life (for instance, an assessment of the amount of time spent with children, partner, family, friends, leisure activities...) and to what extent these activities are easily combined. This would render the measurement more open towards other explanations and thus could inform alternative agendas concerned with WLB.

Appendix

Table A1 Indicators used in multilevel models

Indicators	Min	Max	Mean	SD	N
Work-life balance	1	4	2.36	0.78	16,860
Gender	0	1	0.56	0.50	16,856
Age (41)	-26	44	-0.34	11.23	16,806
Level of education	1	7			14,411
Not completed primary	0	1	0.03	0.17	410
Primary/first stage	0	1	0.10	0.30	1372
Lower secondary	0	1	0.18	0.38	2588
Upper secondary	0	1	0.32	0.47	4634
Post-secondary/non-tertiary	0	1	0.10	0.30	1501
First stage tertiary	0	1	0.19	0.39	2737
Second stage tertiary	0	1	0.08	0.27	1168
Occupational class	1	10			16,517
I	0	1	0.17	0.37	2732
II	0	1	0.24	0.43	3996
IIIa	0	1	0.09	0.28	1448
IIIb	0	1	0.09	0.29	1547
IVac	0	1	0.06	0.24	1007
IVb	0	1	0.04	0.21	743
V	0	1	0.04	0.20	690
VI	0	1	0.09	0.29	1509
VII	0	1	0.16	0.37	2713
Others	0	1	0.01	0.09	131
Household type	1	4			16,323
Single HH	0	1	0.21	0.41	3483
Single breadwinner	0	1	0.23	0.42	3753
Modified dual breadwinner	0	1	0.11	0.31	1735
Dual breadwinner	0	1	0.45	0.50	7352
Children in HH					16,860
No children under 12	0	1	0.60	0.49	10,039
Children under 3	0	1	0.09	0.29	1593
Children between 3 and 5	0	1	0.11	0.31	1824
Children between 6 and 11	0	1	0.20	0.40	3404
Main childcare	1	5			16,860
NA	0	1	0.66	0.47	11,200
HH member	0	1	0.10	0.31	1753
Child alone	0	1	0.02	0.14	339
Extended family/ex-partner	0	1	0.13	0.34	2182
Formal care	0	1	0.07	0.26	1257
Other	0	1	0.01	0.09	129
Housework hours weekday (1)	-1	23	0.38	1.62	16,269
Housework hours weekend (2)	-2	38	0.30	2.45	16,302

Table A1 continued

Indicators	Min	Max	Mean	SD	N
Economic strain	0	3			14,541
Very difficult	0	1	0.05	0.21	657
Difficult	0	1	0.17	0.38	2494
Coping	0	1	0.48	0.50	7030
Comfortably	0	1	0.30	0.46	4360
Housework overload ^a	0	4	2.41	1.13	14,119
Housework inflexibility ^a	0	4	1.01	0.93	14,168
Stressful housework ^a	0	4	1.45	1.01	14,180
Part-time	0	1	0.17	0.37	16,083
Working hours full-time (40)	-9	128	5.47	10.56	13,409
Working evenings/Nights ^b	0	6	1.79	2.05	16,749
Working weekends ^c	0	4	1.60	1.53	16,693
Working overtime ^b	0	6	1.79	1.88	16,607
Job insecurity ^d	0	3	1.22	1.04	13,848
Effort-dependent salary ^d	0	3	0.86	1.04	14,021
Time inflexibility ^d	0	3	2.07	1.11	14,062
Hard work ^a	0	4	2.67	1.03	14,083
Work overload ^a	0	4	2.08	1.15	14,064

Descriptive statistics

No means provided for nominal indicators

Level of education: not completed primary, primary (first stage of basic), lower secondary (second stage of basic), upper secondary, post secondary (not tertiary), first stage of tertiary, second stage of tertiary

Occupational class: I Professional and managers, higher grade; II professionals and managers, lower grade; IIIa routine non-manual employees, higher grade; IIIb routine non-manual employees, lower grade; IVac small employers and proprietors (including farmers); IVb self-employed workers; V technicians and supervisors of manual workers; VI skilled manual workers; VII non-skilled manual workers; others (not classified)

Household types: single household; single breadwinner (partner not working), modified dual breadwinner (partner is part-time); dual breadwinner (partner is fulltime)

Main childcare: child manages alone; extended family/ex-partner; formal care; other; household member (no additional care needed)

Housework hours weekday/weekend: estimates computed from the total hours spent on housework within the household multiplied by the share of housework done by the respondent. Share of housework done by respondent: 0 'none or almost none' 0.2 'up to a quarter of the time', 0.4 'more than a quarter, up to half' 0.6 'more than half, up to three quarters' 0.8 'more than three quarters, less than all' 1 'all or almost all'

Economic strain: very difficult, difficult, coping, living comfortably

^a Answer scales: disagree strongly, disagree, neither disagree or agree, agree, agree strongly

^b Answer scales: never, less than once a month, once a month, several times a month, once a week, several times a week

^c Answer scales: never, less than once a month, several times a month, every week

^d Answer scales: not at all true, a little true, quite true, very true

In further analysis missing values are dummied out

Source: The ESS II (2004–2005), pooled data, weighted by design and population size. Own calculations

References

- Bonney, N. (2005). Overworked Britons? Part-time work and work-life balance. *Work, Employment and Society*, 19, 391–401. doi:10.1177/0950017005053182.
- Byrne, U. (2005). Work-life balance: Why are we talking about it at all? *Business Information Review*, 22, 53–59. doi:10.1177/0266382105052268.
- Charles, N., & Harris, C. (2007). Continuity and change in work-life balance choices. *The British Journal of Sociology*, 58, 277–295. doi:10.1111/j.1468-4446.2007.00151.x.
- Clarke, M. C., Koch, L. C., & Hill, J. E. (2004). The work-family conflict: Differentiating balance and fit. *Family and Consumer Sciences Research Journal*, 33, 121–140. doi:10.1177/1077727X04269610.
- Collins, G. (2007). Cleaning and the work-life balance. *International Journal of Human Resource Management*, 18, 416–429.
- Crompton, R., & Lyonette, C. (2006). Work-life “Balance” in Europe. *Acta Sociologica*, 49, 379–393. doi:10.1177/0001699306071680.
- Crooker, K. J., Smith, F. L., & Tabak, F. (2002). Creating work-life balance: A model of pluralism across life domains. *Human Resource Development Review*, 1, 387–419. doi:10.1177/1534484302238434.
- Dex, S., & Bond, S. (2005). Measuring work-life balance and its covariates. *Work, Employment and Society*, 19, 627–637. doi:10.1177/0950017005055676.
- Dey, I. (2006). Wearing out the work ethic: Population ageing, fertility and work-life balance. *Journal of Social Policy*, 35, 671–688. doi:10.1017/S0047279406000134.
- Erikson, R., Brüderl, J., Gallie, D., Russell, H., & Vallet, L.-A. (2003). *European Social Survey Round 2 module proposal. Family, Work, and Welfare in Europe*. Retrieved 20 November 2007, from European Social Survey Web site: http://www.europeansocialsurvey.org/index.php?option=com_content&task=view&id=64&Itemid=99
- Fleetwood, S. (2007). Why work-life balance now? *International Journal of Human Resource Management*, 18, 387–400.
- Hardy, S., & Adnett, N. (2002). The parental leave directive: Towards a ‘Family-Friendly’ Europe? *European Journal of Industrial Relations*, 8, 157–172. doi:10.1177/095968010282003.
- Hildebrandt, E., & Littig, B. (2006). Concepts, approaches and problems of work-life balance. *European Societies*, 8, 215–222. doi:10.1080/14616690600644939.
- Hill, E. J. (2005). Work-family facilitation and conflict, working fathers and mothers, work-family stressors and support. *Journal of Family Issues*, 26, 793–819. doi:10.1177/0192513X05277542.
- Hyman, J., Scholarios, D., & Baldry, C. (2005). Getting on or getting by? Employee flexibility and coping strategies for home and work. *Work, Employment and Society*, 19, 705–725. doi:10.1177/0950017005058055.
- Jowell, R., et al. (2004/5). *European Social Survey Round II 2004–2005. Technical Report*. Retrieved 20 November 2007, from European Social Survey Web site: http://www.europeansocialsurvey.org/index.php?option=com_content&task=view&id=101&Itemid=139
- Kelloway, E. K., Gottlieb, B. H., & Braham, L. (1999). The source, nature, and direction of work and family conflict: A longitudinal investigation. *Journal of Occupational Health Psychology*, 4, 337–346. doi:10.1037/1076-8998.4.4.337.
- MacInnes, J. (2006). Work-life balance in Europe: A response to the baby bust or reward for the baby boomers? *European Societies*, 8, 223–249. doi:10.1080/14616690600644988.
- Mcdowell, L. (2004). Work, workfare, work/life balance and an ethic of care. *Progress in Human Geography*, 28, 145–163. doi:10.1191/0309132504ph478oa.
- Netemeyer, R. G., Boles, J. S., & McMurrian, R. (1996). Development and validation of work-family conflict and family-work conflict scales. *The Journal of Applied Psychology*, 81, 400–410. doi:10.1037/0021-9010.81.4.400.
- Noor, N. M. (2003). Work- and family-related variables, work-family conflict and women’s well-being: Some observations. *Community Work & Family*, 6, 297–319. doi:10.1080/1366880032000143474.
- Reeskens, T., & Hooghe, M. (2008). Cross-cultural measurement equivalence of generalized trust. Evidence from the European Social Survey (2002 and 2004). *Social Indicators Research*, 85, 515–532. doi:10.1007/s11205-007-9100-z.
- Smithson, J., & Stokoe, E. H. (2005). Discourses of work-life balance: Negotiating ‘Genderblind’ terms in organizations. *Gender, Work and Organization*, 12, 147–168. doi:10.1111/j.1468-0432.2005.00267.x.
- Steenkamp, J. E. M., & Baumgartner, H. (1998). Accessing measurement invariance in cross-national consumer research. *The Journal of Consumer Research*, 25, 78–90. doi:10.1086/209528.
- Wallace, J. E. (2005). Job stress, depression and work-to-family conflict. A test of the strain and buffer hypotheses. *Relations Industrielles Industrial Relations*, 60, 510–537.

- Williams, F. (2001). In and beyond new labour: Towards a new political ethics of care. *Critical Social Policy*, 21, 467–493.
- The 24/7-Survey. (n.d.). Retrieved 20 November 2007 from WorkLifeBalanceCentre.org Web site: <http://www.24-7survey.co.uk>