The role of basic values and education on women’s work and family preferences in Europe

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Abstract
Purpose – Consistent with dual-process models of behaviour, Miles (2015) has shown that Schwartz’s basic values can provide a valuable framework for empirically analysing the role of values and cultural contexts in driving human behaviour. The purpose of this paper is to contribute to this line of research by distinguishing individual values from macro-level values, as well as from other micro- and macro-conditions, in order to test whether individual values shape women’s work-family orientations in ways predicted by Hakim’s preference theory.

Design/methodology/approach – The authors make use of the second round of the European Social Survey (ESS) collected in 2004, where a battery of questions on human values and work-family preferences were posed, and apply a multilevel approach to take into account national cultural and economic conditions across 25 European countries.

Findings – In line with the dual-process model and preference theory, the authors show that internalised values, particularly conservatism, shape work-family orientations much more than national social and cultural conditions; in addition, the effect of women’s education on work-value orientations is stronger in countries with more conservative national cultures, suggesting that education may help women overcome social barriers in the choice of their work-career preference.

Originality/value – While values may shape work-family orientations differently in non-European or less affluent cultures, these findings reveal the importance of bringing values back into the analysis of individual preferences and behaviours towards the labour market.

Keywords Education, Values, Gender, Preference theory

Paper type Research paper

Introduction
Since the decline of structural functionalism in the 1970s, there has been reluctance in sociology to consider the role of values in shaping human action (Hitlin and Piliavin, 2004). This is particularly the case in research relating to labour market preferences and decisions, where human capital – expressed in terms of education, cognitive ability, or a variety of other skill sets – has been regarded as the primary determinant of labour market outcomes (Becker, 1964; Mincer, 1974; Heckman, 2000). Human values also play a muted role in the research tradition on status attainment, where the dynamic interaction between family origin, educational attainment, peer influences, aspirations, and related factors drive the allocation of social status. At the same time, socio-economic barriers, and policy interventions aimed at reducing those barriers, are widely regarded as the core determinants of women’s labour market participation. With full respect to these research traditions, the importance of values on labour market preferences and decisions is more often ignored than empirically tested.

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Since the writing of this article Petr Matějů regrettably died.

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At the same time, theories of modernisation (Giddens, 1990, 1991) suggest that the force of values should be particularly relevant in late modern societies, where “men and women gain not only the freedom to choose their own values and lifestyles, but they are also obliged to make their own choices, because there are no universal certainties and no fixed models of the good life” (Giddens, 2000). Giddens concurred with Hakim’s preference theory, according to which fundamental historical changes in social and economic life have brought about a “new scenario” which “constitutes a fundamental break with the past, giving modern women real choices between a life centred on family work and/or on paid work” (Giddens, 2000) that are based on their core values rather than socio-economic or institutional conditions.

How do education and human values work together to shape work and family preferences, especially among women? The question is particularly relevant in light of the significant reversal in the gender gap in the attainment of higher education in late modern societies. Sociologists have consistently found that, controlling for a multitude of factors, women now surpass men in higher education enrolment and completion in the USA and Europe (Buchmann and DiPrete, 2006; Buchmann et al., 2008; DiPrete and Buchmann, 2013; OECD, 2015), reflecting a much larger transformation in the opportunities and choices available to women. Men still predominate in the fields of science, technology, engineering and mathematics, but this may be due more to the values and expectations instilled on boys and girls when young, rather than institutional constraints preventing female participation (Jacobs, 2005).

Building on this research, we analyse the degree to which education and values contribute to work- and family-based preferences of European women, who are more often than men confronted with a complex matrix of choices in terms of whether and how to give priority to family life or occupational careers – or a balance between both. In addition, the role of education and values raises the question of the extent to which women’s choices are still constrained by social, economic and institutional conditions, such as persisting gender inequality (e.g. gender inequality in access to higher education, incomes, traditional male occupations and managerial positions), limited availability of part-time jobs and childcare services, and systems of family social benefits.

To take into account these different factors, we take advantage of the second round of the European Social Survey (ESS), where a battery of questions on human values and work-family preferences were posed, and utilise a multilevel approach to take into account national cultural and economic conditions across 25 European countries. We first set up our analysis in terms of the theoretical expectations of Schwartz’ human values theory and Hakim’s preference theory, which we find to be consistent with each other as well as with dual-process models of human behaviour. We then overview our data and methods, and then highlight the main findings, contributions and limitations of our empirical results.

Theoretical context
Immanuel Kant instilled in Western thinking the idea that the moral judgements are a matter of practical reason: we have the capacity to act according to principles, as well as understand what those principles are. However, as Swidler (1986) argued, even if individuals pursue consistent lines of action, they do a poor job of providing consistent reasons for their behaviour. Swidler, as well as many other sociologists, concluded that rather than motivating actions, values that permeate society are utilised by individuals as tool kits, strategies and repertoires for justifying their actions, which may in turn be motivated by other factors unrelated to those values. We all say we marry out of love, even if such actions might be motivated by a variety of economic, institutional and practical considerations that sociological research unveils.
This view is based on a problematic logic: it presumes that if values motivate actions, we must be reasonably aware of them; therefore, since we are not reasonably aware of them, values cannot be motivating actions (Vaisey, 2009). But what if values have causal import regardless of our awareness of them? Recent research in cognitive science has revealed that cognitive processes have at least two dimensions: an effortless, fast and implicit component, and a deliberate, slower and analytical component. It is the former implicit dimension that drives most actions in life, whereas the explicit dimension is used to tackle specific tasks (Sun et al., 2001, 2005). Such dual-process models of cognition suggest that individuals internalise an array of values, predispositions and beliefs that influence their actions, even if they are unaware of such processes or are unable to articulate what values, predispositions or beliefs might be motivating them.

Dual-process models have provided a coherent understanding that values can drive action, as well as how they can drive action (Evans, 2008). In addition, they provide an empirically grounded cognitive framework for making sense of earlier sociological theories that posited dual processes to be at work, such as Polanyi's tacit vs explicit knowledge (Polanyi, 1966), or Giddens' practical vs discursive levels of a "stratified self" (Giddens, 1984). Those theories also posited that actions can be motivated by values and beliefs without people being able to articulate them. Dual-process models are also compatible with recent economic models of rational inattention that account for decision making in situations where explicit rationality is costly (Sims, 2003; Matejka and McKay, 2015), as well as with recent political research on the role of informational cues and cognitive shortcuts, as opposed to explicit knowledge, in driving political behaviour (Lupia, 1994; Druckman and Lupia, 2000).

More importantly for our present purpose, dual-process models are also consistent with the view that core human values can provide a valuable framework for empirically analysing the role of motivating culture in driving human behaviour. Building on the dual-process model, Miles (2015) has developed a robust conception of the role of social and cultural contexts in moderating the effects of values on actions, and tested that conception using the same data set as this present paper. Moving beyond dual-process models' focus on process towards the specification of the content of values that matter, he pointed out that "contexts provide a framework of cultural understandings that help actors decide what behaviours mean, which in turn influences how those behaviours are motivated" (Miles, 2015, pp. 685-686), i.e., contexts can provide insight into which, when and how value constructs are applied.

More specifically, values should predict the motivations that they represent: the value of conservation should predict conservative lifestyle preferences and actions, such as traditional gender roles in work and family life. Building on Schwartz (2010), Miles (2015) pointed out that "if a behavioural context activates multiple competing values, then the final motivational impulse will represent the trade-offs among them -- an inclination to help might be offset by a desire for personal gain, for example" (p. 685). In the context of a large social survey, we should also be able to predict that value effects will be larger when they are closely linked to behaviourally relevant attitudes.

Miles used the second wave of the ESS to empirically test the dual-process model because that survey contained a battery of questions measuring values according to Schwartz' (1992, 1994, 1996, 2006) basic values theory, which can be used to analyse the degree to which values are linked to personal experiences and how they influence people's attitudes and behaviour. According to Schwartz, a theory of how values influence action should consistently meet several fundamental requirements, apart from universality (validity for the majority of known cultures): the values have to function as projections/ideas of a strongly normative character (if activated, they evoke positive or negative effects); values are connected to desired (preferred) goals and they motivate individuals to reach them; values are independent of specific situations, which make them different from attitudes; values serve as standards or criteria which are applied (consciously or unconsciously)
by individuals in assessing other people, policies, events, etc.; values are prioritised according to their importance, i.e., they represent an ordered system of priorities characterizing individuals or groups, which makes them different from norms and attitudes; and the relative importance of value “clusters” determines behaviour, in case they are activated for individuals by significant contexts.

Schwartz’ basic values theory has been tested in a large variety of empirical contexts (e.g. Fontaine et al., 2008; Davidov et al., 2008), and has been shown to strongly influence many kinds of social, environmental and economic behaviours. As a result, the battery of 21 questions used to identify the ten basic values has been included in a wide range of social surveys, including the second wave of ESS. These basic values, shown in Figure 1, are self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence and universalism.

It is substantial for our analysis that, according to Schwartz (2006), the value structure can be expressed in two orthogonal dimensions: the first dimension puts self-enhancement and self-transcendence on opposite sides, meaning that they are in conflict; the value types lying along this dimension are power and achievement, which primarily highlight concerns about one’s own interests (self-direction) and represent the opposite to universalism and benevolence (interest in the benefit of others). The second dimension put openness to change in opposition to conservation; the former represents the value of independent behaviour and thought, and readiness for new experiences, while the latter refers to the values of security, conformity and tradition.

If basic values influence work and family preferences, a reasonable theoretical expectation is that the value of conservation – which we can also refer to as conservative values for simplicity – would be strongly associated with traditional family and work choices. However, we also need an appropriate, middle-range theory accounting for what such choices are and why they would be predicted by values and other factors in different contexts. The most suitable candidate is Hakim’s (1998, 2000, 2002) preference theory. In her key work Work-Lifestyle Choices in the 21st Century (Hakim, 2000), Hakim presented five major social and economic changes in the last century that gradually reduced the role of institutional constraints, while also increasing the role of individual preferences, in which women made important life decisions (Hakim, 2000). These included: the contraceptive revolution of the mid-1960s that gave sexually active women control over their fertility;

![Conceptual model of relations among ten human values](image-url)
the “equal opportunities revolution” opened up women’s equal access to the labour market; the expansion of white-collar occupations attractive to women, especially compared to blue-collar occupations; the increase in job opportunities for secondary earners (mainly part-time jobs) who do not want to prioritise paid work over other life interests; and the growing significance of attitudes, values and preferences in the lifestyle choices of affluent modern societies.

These five processes did not take place in all societies simultaneously and to the same degree, though they are a common characteristic of countries undergoing modernisation. To Hakim, these processes have created a “new scenario” in which women’s lives have become more heterogeneous than in the past as well as more heterogeneous than men’s, because women’s life choices are less determined than men by prestige, power and social origin (Hakim, 2000). That heterogeneity has given rise to three ideal types of women (Hakim, 2000), namely home-centred women-oriented primarily towards children and family life and preferring not to work (around 20 per cent of female populations), work-centred women who are deeply committed to their careers (approx. 20 per cent), and adaptive women who aim to strike a balance between work and family life (around 60 per cent).

While preferences can be shaped by public policies, a distinctive feature of her work is the acknowledgement that individual values, rather than structural conditions, determine women’s life preferences and goals in modern, affluent societies, but not pre-modern ones: “preference theory accepts that attitudes and values have little scope for influencing behaviour in pre-modern societies and, more particularly, in societies that have yet to fully implement the new scenario for women, because most decisions are still shaped by economic necessity and rigid social conventions in such societies” (Hakim, 2003b, p. 125). Preference theory does not claim that structural constraints in modern societies are nonexistent, but that they have diminished in importance as the conditions underlying the new scenario have been realised.

Hakim additionally points out that the three preference groups differ in the consistency of both those preferences as well as their underlying values. In the manner described by Miles (2015), adaptive women’s choices are strongly shaped by the context around them as they aim to balance work and family priorities. By contrast, work-centred women are more consistent in terms of their preference for monetized work over family life, and thus are less determined by contextual factors, including various successes and failures in their career, or whether they decide to have a child (Hakim, 2003a). At the end of Models of the Family in Modern Societies, Hakim (2003b) suggests that the preferences of family-based and careerist women do not imply that those preferences imply consistent internal values: careerist women, for example, may have conflicting value orientations towards patriarchy, tradition, security and other values as they maintain their preference for a work-centred lifestyle. Thus, even if some values are likely to influence specific lifestyle preferences, both the theory of basic values and preference theory concur that this does not imply that one’s value commitments are not in conflict (Hakim, 2006).

Lastly, while preference theory places the autonomy of women’s preferences at centre stage, this does not mean that education or other dimensions of human capital do not matter. Preferences are linked to education in two fundamental ways. First, the value of education consists not only in generating labour market returns, but also in marriage market opportunities and lifestyle quality improvements (Hakim, 2003b). As women’s educational attainment expands, the role of education in these lifestyle preferences expands as well. Second, preference theory views education as a process of self-selection linked to prior lifestyle preferences and aspirations: girls who aspire to professional careers are more likely to select into higher levels of education compared to girls who envision their futures largely in terms of romantic relationships. This leads to the empirical expectation that the coefficient of education be strongly positive for work-centred women, compared to adaptive women or family-centred women.
Preference theory has led sociologists to take lifestyle preferences more seriously into account in research on female employment, as well as to various extensions or modifications of the theory. For example, Kan’s (2007) analysis of British Household Panel Survey data from 1991 to 2001 confirmed the importance of women’s preferences on career decisions, but also found that on-the-job barriers, which women encounter more frequently than men, can discourage women from pursuing professional roles, which leads those women to be less professionally oriented. Her results show that women’s professional careers are influenced by their preferences as well as by micro-level barriers and experiences they have in the labour market. By contrast, Crompton and Harris (1998a, b) sought to challenge preference theory using qualitative interviews with women, who they claim changed their family and work statuses without having to change their lifestyle preferences, and that their status changes were due primarily to social barriers.

Those analyses reveal the importance of putting preference theory to the test by taking into account the role of socio-economic conditions at the individual (micro) and social (macro) when estimating the effect of values on lifestyle preferences. To do that, we will explore the value orientations of women categorised into the three ideal types, and then examine cross-national differences in prevailing values, employment and childcare conditions, and other circumstances that are believed to significantly impact the work-family orientations of women. Because the process of modernisation erodes some of the institutional bases of traditional culture, we will particularly focus on the role of conservation (conservative values) at the micro- and macro-levels in shaping family and work preferences.

The theoretical frameworks above provide plausible and testable hypotheses on the role of values on work-centred and family-centred preferences of European women. Our first hypothesis is that, as suggested by Miles (2015), if human values shape behaviour, then values conceptually associated with work-centred and family-centred preferences should have substantively strong effects on them in the predicted direction (conservative values predicting family-centred preferences and the opposite orientation – the value of self-direction – predicting work-centred preferences).

Second, while preference theory does not deny that socio-economic barriers can matter, it does lead to the prediction that relevant socio-economic barriers at the societal level should have a relatively small impact on lifestyle preferences compared to values or other factors women can control, such as education. To test this, we operationalise those barriers in terms of the degree of conservatism and masculinity in the society, the general level of inequality between men and women, workplace flexibility, and the availability of childcare.

Third, because educational attainment may itself be rooted in professional aspirations, we would expect that education is strongly associated with work-centred preferences. Since the rise of women’s education is one of the ways the “new scenario” was brought about, the role of education in the self-realisation of preferences should be particularly important in countries with more traditional cultural values.

Data and variables
The analysis for this paper is based on the finalised cross-national data set of the second round of the ESS realized from 2004 to 2005 in 25 European countries, covering 47,537 respondents. This is the only round of the ESS in which batteries on Schwartz’ basic values and Hakim’s preference theory were proposed in a standardized way, and which have been used by other authors (Andringa et al., 2012; Miles, 2015). The main analyses were carried out on a subsample of women 20-59 years old who were not retired at the time of the survey, which is the same sample restriction used by Hakim in her comparison of Spain and Great Britain (Hakim, 2003b), as well as by other authors replicating her analysis (e.g. Andringa et al., 2012). This analytical file contained 15,638 female respondents ranging from...
210 (Iceland) to 915 (Germany). We used two types of weights: the post-stratification weight (pspwght) for descriptive analyses performed at the country level, and the weight combining post-stratification and population weights (pweight) for analyses pooling more than one country.

In considering the items available in the ESS, we aimed to construct a dependent variable of work-centred preferences composed of both attitudinal and behavioural items that synthesise women’s labour market activity (having a job) and its main outcome (their share of household income) with items that reveal preferences to be professionally active. “Work-centred preferences” were thus constructed by the following four items:

1. women should be prepared to cut down on paid work for the sake of the family (disagreement);
2. men should have more right to job than women when jobs are scarce (disagreement);
3. respondent has a job; and
4. proportion of household income respondent provides.

To construct the dependent variable, we applied principal component analysis which identified just one latent variable accounting for 47 per cent of the common variance of the four items with the following factor loadings: 0.612, 0.694, 0.694, and 0.733. Tests of scale equivalence carried out by multi-group confirmatory factor analysis indicated partial metric equivalence due to the inclusion of the two behavioural variables. The dependent variable is therefore appropriate for multivariate analysis.

However, several caveats are in order. The variable should be viewed only as a proxy for work-centred preferences, rather than a replication of the measurement used by Hakim, due to the limitations of the variables available. In particular, items (1) and (2) refer to women’s attitudes towards work and family priorities in general, which may or may not differ from the work and family priorities they apply to themselves (data for which are unfortunately unavailable). Caution should also be taken in interpreting the descriptive statistics (means) of this variable (Davidov et al., 2014), which are provided only for illustrative purposes (Figure 2 and Tables I and II). Despite these caveats, the fact that the latent variable reasonably accounts for variation in the underlying items, and that the items all refer to important components of Hakim’s conception of work and family preferences, provide reasonable justification for using the variable as a proxy for work and family preferences. Figure 2 provides the means and confidence intervals of the latent variable for individual countries.

To simulate original Hakim’s typology, and following Kan’s (2007) analytical strategy, we also created five quintiles of the dependent variable for descriptive purposes. The first and the fifth quintile define work-centred and family-centred preferences, respectively, with the middle quintiles delineating adaptive women. Table I provides the distributions of women in individual preference types across countries. The results in Figure 2 and Table I show that women’s work-centred preferences are particularly strong in Scandinavian countries (Denmark, Sweden, Finland and Norway), followed by France, Belgium, Germany and the Netherlands. In other countries, namely in Poland, Ukraine, Turkey, Hungary, Portugal, Spain and the Czech Republic, work-centred preferences are significantly weaker. The average distributions of these preferences across Europe generally correspond to the 20/60/20 distributions anticipated by preference theory, and vary by the degree of modernisation.

As mentioned previously, ESS items on basic values have been widely tested for reliability and validity on international data. The specific items used to measure human values (the so-called Portrait Value Questionnaire) can be found in the ESS supplementary questionnaire.[1] To calculate scores corresponding to individual dimensions of the value structure shown in Figure 1, we used the algorithm for centred value scores proposed by Schwartz and recommended by the ESS consortium[2].
Due to the impracticality of estimating all human values, that some are not directly related to work and family preferences, and that there may be multicollinearity between some values, we focus on the most relevant values, conservation and self-direction, which is also patterned on the approach of Miles (2015). Given that preference theory predicts that the role of values should increase as societies transform from traditional to modern, we also take into account the level of conservatism at the country level (the country mean of the conservation values reported by women).

Testing the role of values on preferences requires taking into account a variety of controls referring to contextual constraints that may also influence those preferences. Therefore, we also use the gender gap index developed by the World Economic Forum (Hausmann et al., 2006). The index measures the gap between men and women in four fundamental categories: economic participation and opportunity, educational attainment, health and survival, and political empowerment, which are calculated from 14 indicators (see Hausmann et al., 2006, pp. 5-6). Higher values of the gender gap index indicate more gender equality.

In addition, we also controlled for the impact of labour market and social policies via country-level variables indicating the availability of part-time jobs, workplace flexibility, availability of childcare and family welfare benefits. Data on part-time jobs were drawn from the report of the European Foundation for the Improvement of Living and Working Conditions (Sándor, 2011). Because those indicators corresponded closely to country means of part-time jobs reported in the ESS data, we used the ESS data for the countries not covered by this report. This approach has no material impact on the results. The indicator of

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**Figure 2.**

Means and confidence intervals of work-family preferences among women

*Source: ESS2 – edition 3.4, data weighted by post-stratification (pspwght), authors’ own calculations*
workplace flexibility is drawn directly from the ESS data and thus refers to the workplace constraints experienced by respondents. The variable was based on two questions: “How much does the management at your work allow you to decide how your own daily work is organised?” and “How much does the management at your work allow you to choose or change the pace of your work?” Respondents answered these questions using the scale from 0 (not at all) up to 10 (completely). The composite variable for workplace flexibility was constructed by principle component analysis and averaged by country, and achieved similar equivalency of scale as with the dependent variable. The availability of childcare is an indicator developed by the World Economic Forum. It measures the accessibility of government-provided childcare assessed in WEF’s Executive Opinion Survey using the following question “In your country, government-provided childcare is (1 = nonexistent or very limited, 7 = widely accessible). The values of the index have been drawn from the same source as the gender equality index (Hausmann et al., 2006). “Family welfare benefits” is an OECD indicator measuring both cash benefits and benefits in kind (child allowances and credits, childcare support, income support during leave, single-parent payments expressed in PPP US dollars). We used data referring to year 2002.

As for the flexibility of work conditions, the descriptive results presented in Table III demonstrate that there are considerable differences among European countries both in the flexibility of working arrangements expressed by the share of part-time jobs and in the possibility of adapting work regimes to one’s own possibilities and needs. The share of the economically active men with part-time jobs ranges from 5 per cent in Slovenia to 45 per cent in the Netherlands, compared to the range of 7 per cent in Slovenia to 62 per cent

<table>
<thead>
<tr>
<th>Country</th>
<th>Preference type</th>
<th>Work-centred</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turkey</td>
<td>62.0</td>
<td>34.1</td>
<td>3.9</td>
</tr>
<tr>
<td>Greece</td>
<td>24.9</td>
<td>61.1</td>
<td>14.0</td>
</tr>
<tr>
<td>Ukraine</td>
<td>22.4</td>
<td>71.5</td>
<td>6.1</td>
</tr>
<tr>
<td>Portugal</td>
<td>19.9</td>
<td>68.5</td>
<td>11.6</td>
</tr>
<tr>
<td>Poland</td>
<td>17.9</td>
<td>67.5</td>
<td>14.7</td>
</tr>
<tr>
<td>Spain</td>
<td>14.5</td>
<td>64.0</td>
<td>21.5</td>
</tr>
<tr>
<td>Hungary</td>
<td>18.0</td>
<td>71.5</td>
<td>10.5</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>13.1</td>
<td>65.4</td>
<td>21.4</td>
</tr>
<tr>
<td>Switzerland</td>
<td>12.8</td>
<td>67.5</td>
<td>19.6</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>13.0</td>
<td>72.4</td>
<td>14.6</td>
</tr>
<tr>
<td>Ireland</td>
<td>11.1</td>
<td>74.3</td>
<td>14.6</td>
</tr>
<tr>
<td>Germany</td>
<td>11.3</td>
<td>62.6</td>
<td>26.1</td>
</tr>
<tr>
<td>Belgium</td>
<td>10.3</td>
<td>59.7</td>
<td>30.0</td>
</tr>
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<td>Austria</td>
<td>10.7</td>
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<tr>
<td>Slovakia</td>
<td>10.0</td>
<td>74.7</td>
<td>15.3</td>
</tr>
<tr>
<td>the Netherlands</td>
<td>8.2</td>
<td>67.1</td>
<td>24.7</td>
</tr>
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<td>the UK</td>
<td>10.5</td>
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<td>21.6</td>
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<td>64.7</td>
<td>27.3</td>
</tr>
<tr>
<td>Estonia</td>
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</tr>
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<td>74.6</td>
<td>21.4</td>
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<tr>
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<tr>
<td>Sweden</td>
<td>0.8</td>
<td>54.8</td>
<td>44.4</td>
</tr>
<tr>
<td>Total</td>
<td>13.4</td>
<td>64.2</td>
<td>22.3</td>
</tr>
</tbody>
</table>

Source: ESS2 – Edition 3.4, data weighted by post-stratification weight (pspwght), authors’ own calculations
in the Netherlands in the case of women. Clearly, the Netherlands, Scandinavian countries, Austria, Germany and France create better conditions for women’s workplace flexibility than Central and Eastern Europe (Czech Republic, Hungary, Slovenia, Poland and Slovakia). Figures 3-6 display the distributions of other national level variables, namely the level of conservatism (aggregated by country from individual responses), family welfare benefits, overall level of the gender gap and the availability of childcare.

Lastly, attained education is categorised based on ISCED classifications (1 = lower secondary, 2 = upper secondary with the school-leaving certificate, 3 = tertiary), with the first category serving as the reference group. Given the diversity of educational systems in Europe, this approach enables direct and reliable comparisons and meaningful reference points without having to consider the multitude of institutional differences.

Results
Given the role of education in our hypotheses, Table III reports the distribution of work and family preferences (simulating Hakim’s preference types) by the highest level of educational attainment. While 34 per cent of women with only lower secondary education are family-centred, only 9 per cent of college-educated women have this preference. Conversely, 29 per cent of women with college education are work-oriented compared to 11 per cent of women with only lower secondary education. Adaptive women, by contrast, have diverse educational attainments. We should recall here the possible endogeneity
of education: young women may make choices about their education depending on their family and work preferences, while their educational attainments may then contribute to their preferences realized latter in life (at the time of the survey).

Zero-order correlations displayed in Table IV (with number of cases with non-missing values above the main diagonal) indicate that the key associations between the explanatory and dependent variables are indeed strong and significant. The highest

<table>
<thead>
<tr>
<th>Preference types of women by completed education (in per cent)</th>
</tr>
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<tbody>
<tr>
<td>Type</td>
</tr>
<tr>
<td>Elementary or lower secondary</td>
</tr>
<tr>
<td>Higher secondary (with school-leaving certificate)</td>
</tr>
<tr>
<td>College or university</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Source: ESS2 – edition 3.4, data weighted by post-stratification (pspwght) and population weights (pweight), authors’ own calculations, based on ISCED classification of education

Figure 3. Mean levels of conservatism in countries participating in ESS, second round

Note: The index of country-level conservatism is of limited scalar equivalency, we present its means only for illustrative purposes

Source: ESS2 – edition 3.4, data weighted by post-stratification weight (pspwght), authors’ own calculations

Downloaded by 109.181.111.10 at 04:57 24 September 2017 (PT)
correlations in the first column of the table are between work-centred preferences, the overall level of gender equality, family social benefits, workplace flexibility and country-level conservatism. It also interesting that family social benefits sharply decrease with country conservatism, while they are positively correlated with workplace flexibility and the availability of part-time jobs. These results indicate that a social climate based on prevailing values is strongly intertwined with relevant government and employees’ policies. Several correlations between the independent variables indicate potential multicollinearity, namely between part-time jobs, workplace flexibility, family social benefits and country conservatism. To avoid multicollinearity in our models, we decided to leave out the variable on workplace flexibility from the main analysis and not enter all independent variables in the same model (instead, we used only relevant subsets of independent variables in in one equation).

To reiterate, our theory-driven hypotheses were that if human values shape behaviour, then values conceptually associated with work-centred and family-centred preferences – specifically the values of conservation (conservatism) and self-direction – should have substantively strong effects on the dependent variable; relevant barriers at the societal level should have a relatively small impact on lifestyle preferences compared to values or other factors women can control, such as education; and because educational attainment may itself be rooted in professional aspirations, we would expect that education is strongly associated with work-centred preferences, particularly in more traditional cultural contexts where education might be particularly important for self-realisation. Because we want to take into account micro-and macro-factors across 25 European countries, we deemed it most reasonable to utilise a mixed

![Image](image-url)

**Figure 4.**
Mean levels of the availability of childcare in countries participating in ESS, second round.

**Source:** Global Gender Gap Report (2006)
effects approach expressed by the following equation:

\[
\gamma_{ij} = \gamma_{00} + \gamma_1(\text{conservatism})_j + \gamma_2(\text{self-direction})_j + \gamma_3(\text{secondary education})_j + \gamma_4(\text{tertiary education})_j + \gamma_5(\text{age})_j + \gamma_6(\text{country conservatism})_j + \gamma_7(\text{part-time jobs})_j + \gamma_8(\text{childcare})_j + \gamma_9(\text{family welfare})_j + \gamma_{10}(\text{gender equality})_j + \gamma_{11}(\text{country} - \text{conservatism})_j \times \text{(secondary education)}_j + \gamma_{12}(\text{country} - \text{conservatism})_j \times \text{(tertiary education)}_j + u_{0j} + u_{1j} + \epsilon_{ij}, \tag{1}
\]

where \( \gamma_{ij} \) is the estimated value of the continuous dependent variable indicating work-centred preferences of \( i \) respondents across \( j \) countries, \( \gamma_{00} \) is the intercept, \( \gamma_1 \) to \( \gamma_{12} \) are regression slopes with variables at the first and second level, respectively, \( \gamma_{11} \) and \( \gamma_{12} \) are interaction effects between education and value context, and \( u \) and \( \epsilon \) errors at the second and first level, respectively. Because we assume that work-family preferences vary significantly between countries, we allow the intercept to vary as well (set as random). We also assume that slopes \( \gamma \) do not vary between countries, and are thus set as fixed. Only the last model allows the slopes of conservatism and self-direction on work-centred preferences vary between countries, so they are set as random (this reasonable assumption is documented in Figure 7 displaying standardized regression coefficients for conservatism and self-direction, controlling for education and age). The results of our model-building approach are displayed in Table V.
The first benchmark model tests only the effects of individual characteristics (education and age). To be able to compare the effects of variables with different metrics and measured on different levels, we present standardized regression coefficients ($\beta$). All effects of the baseline model are highly statistically significant. The likelihood ratio associated with this model is 28,629, while the proportion of variance in the dependent variable associated with differences between countries (ICC) is 14 per cent.

Model 2 tests the effects of the values of conservatism and self-direction operating at the individual level, controlling for education and age. As expected, both these values show statistically significant effects on work-centred preferences, though the net negative effect of conservatism ($-0.135$) is stronger than the positive effect of self-direction ($0.070$). It is worth noting that the improvement of model fit (compared with Model 1, $-2LL$ diff is 403.6) is large and highly significant. The results of this model support the assumption that the two relevant values and motivational mechanisms strongly shape women’s work-centred preferences.

In Model 3, we evaluate the effect of conservatism operating at the country level. The size of the effect is comparable with the effect of conservatism at the individual level ($-0.140$) and also statistically significant ($p = 0.060$). Adding country conservatism reduces the proportion of variance in the dependent variable associated with differences between countries (ICC) by 3 per cent compared with Model 2 and 5 per cent compared with Model 1. However, the model fit improvement associated with this particular independent variable is negligible and only weakly significant ($p = 0.317$). The same holds for Model 4, which adds the availability of part-time jobs and childcare. Though their effects are quite strong (actually stronger than the effect of country conservatism), the model fit improvement is rather small and statistically insignificant. On the other hand, the ICC values show that

---

**Figure 6.** Mean levels of family social benefits for countries participating in ESS, second round.
<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Work-centred preferences</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(2) Conservatism</td>
<td>−0.082***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(3) Self-direction</td>
<td>0.368***</td>
<td>−0.505***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>(4) Secondary education</td>
<td>0.011***</td>
<td>−0.067***</td>
<td>0.078***</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(5) Tertiary education</td>
<td>0.228***</td>
<td>−0.159***</td>
<td>0.186***</td>
<td>−0.035***</td>
<td>0.002</td>
<td>−0.009***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Country conservatism</td>
<td>−0.263***</td>
<td>0.254***</td>
<td>0.304***</td>
<td>−0.033***</td>
<td>0.033***</td>
<td>−0.138***</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(7) Part-time jobs</td>
<td>0.237***</td>
<td>−0.150***</td>
<td>0.187***</td>
<td>−0.035***</td>
<td>0.002</td>
<td>−0.009***</td>
<td>1.000</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>(8) Workplace flexibility</td>
<td>0.264***</td>
<td>−0.212***</td>
<td>0.254***</td>
<td>0.121***</td>
<td>0.033***</td>
<td>−0.038***</td>
<td>0.784***</td>
<td>1.000</td>
<td></td>
<td></td>
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<tr>
<td>(9) Availability of childcare</td>
<td>0.306***</td>
<td>−0.150***</td>
<td>0.187***</td>
<td>−0.035***</td>
<td>0.002</td>
<td>−0.009***</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Family social benefits</td>
<td>0.060***</td>
<td>−0.219***</td>
<td>0.254***</td>
<td>0.121***</td>
<td>0.033***</td>
<td>−0.038***</td>
<td>0.784***</td>
<td>1.000</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>(11) Gender equality</td>
<td>0.382***</td>
<td>−0.193***</td>
<td>0.200***</td>
<td>0.151***</td>
<td>0.088***</td>
<td>−0.000***</td>
<td>0.180***</td>
<td>0.564***</td>
<td>0.291</td>
<td>0.551***</td>
<td>1.000</td>
<td></td>
</tr>
<tr>
<td>(12) Age</td>
<td>0.642***</td>
<td>0.215***</td>
<td>−0.035***</td>
<td>−0.100***</td>
<td>−0.007***</td>
<td>−0.122***</td>
<td>0.088***</td>
<td>0.116***</td>
<td>0.099***</td>
<td>0.115***</td>
<td>0.690***</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: ESS2, data weighted by post-stratification (pspwght) and population weights (pweight), authors' own calculations

Notes: * p < 0.05; ** p < 0.01; *** p < 0.001
adding the three variables operating at the country level to Model 1, namely country conservatism, availability of part-time jobs and childcare, brings about a reduction in the variance of the dependent variable associated with differences between countries by half (from 14 to 7 per cent).

The inclusion of the two indicators relating to the presence of government policies improving conditions for women’s emancipation and the development of their work-career orientations – i.e. family welfare benefits and the index of overall gender equality – brings about a markedly larger and statistically significant improvement in model fit (Model 5). The effects of both these country-level variables are strong and statistically significant. The ICC drops to 4 per cent compared with Model 4. To avoid multicollinearity, country conservatism was excluded from this model (the correlation between country conservatism and family welfare benefits is 0.836).

Model 6 adds interaction effects between the country level of conservatism and education in order to account for whether women’s choices to pursue education vary by value context. There is a positive and highly significant interaction between country conservatism both secondary and tertiary education, confirming that the effect of education on work-centred preferences is stronger in more conservative social contexts. These interactions are of fundamental importance, because they suggest that the expansion of educational opportunity helps women overcome socially conservative constraints in pursuing work-career preferences. The LR test between Models 5 and 6 confirm the large reduction of error parameters ($p < 0.000$), which confirms the role of education as an emancipatory mechanism in nations with stronger conservative values.

Model 7 is identical with Model 6 in terms of the effects involved, the only difference being that Model 7 sets the slopes of conservatism and self-direction as random (i.e. country specific). LR test shows statistically significant reduction of error parameters ($p < 0.000$).
<table>
<thead>
<tr>
<th>Parameter</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td>-0.013</td>
<td>-0.030</td>
<td>-0.067</td>
<td>-0.056</td>
</tr>
<tr>
<td>Secondary education</td>
<td>-0.087</td>
<td>-0.077</td>
<td>-0.068</td>
<td>-0.066</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>0.211</td>
<td>0.193</td>
<td>0.184</td>
<td>0.175</td>
</tr>
<tr>
<td>Age</td>
<td>0.010</td>
<td>0.008</td>
<td>0.010</td>
<td>0.009</td>
</tr>
<tr>
<td>Conservatism</td>
<td>-0.135</td>
<td>-0.135</td>
<td>-0.134</td>
<td>-0.128</td>
</tr>
<tr>
<td>Self-direction</td>
<td>0.070</td>
<td>0.067</td>
<td>0.067</td>
<td>0.065</td>
</tr>
<tr>
<td>Country conservatism</td>
<td>-0.140</td>
<td>-0.122</td>
<td>-0.107</td>
<td>-0.092</td>
</tr>
<tr>
<td>Part-time jobs</td>
<td>0.183</td>
<td>0.174</td>
<td>0.168</td>
<td>0.146</td>
</tr>
<tr>
<td>Availability of childcare</td>
<td>0.140</td>
<td>0.121</td>
<td>0.103</td>
<td>0.092</td>
</tr>
<tr>
<td>Family welfare</td>
<td>0.169</td>
<td>0.150</td>
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<td>0.092</td>
</tr>
<tr>
<td>Gender equality index</td>
<td>0.160</td>
<td>0.146</td>
<td>0.123</td>
<td>0.090</td>
</tr>
</tbody>
</table>

**Notes:** The dependent variable is "work-centred preferences." ICC stands for intra-class correlation showing the proportion of variance of the dependent variable associated with differences between countries. -2LL diff. stands for the difference in -2LL between the current model and the previous one. sig. is the statistical significance of the difference. Variables in italic measured at the country level. All variables (including dependent variable) have been standardized.

**Source:** ESS2 - edition 3.4, data weighted by post-stratification (pspwght) and population weight (pweight), authors' own calculations.

**Table V.** Multilevel analysis of the determination of work-centred preferences of women.
Conclusions

We can draw several conclusions from the analyses. First, the results give credence to Hakim’s preference theory in terms of distributions of women by preference types and in terms of the expected associations with other value orientations, despite using the ESS data across 25 different countries. Indeed, the preference types proposed by Hakim are closely linked to value orientations derived from the Schwartz theory of basic values and their measurement. The analysis particularly found a strong interconnection between the preference types and commitments to conservatism and self-direction (openness to change).

Second, we found that women’s work-family preferences are closely related to education in two respects. Higher levels of attained education drive work preferences, thus the expansion of women’s educational opportunities may be a key factor in the “new scenario” contributing to stronger work preferences. Third, the comparative analysis also demonstrated that there are significant differences between European countries both in prevailing value orientations (conservatism at a country level), overall gender gap, level of masculinity, labour market and family policy conditions enabling or constraining the formation of the work-centred preferences. Our key conclusion is that educational attainment can considerably “moderate” the unfavourable impact of a conservative social climate. Even though our intention was not to test Miles’ (2015) dual-process model, our results support the main contention of that theory, i.e. that the effects of values on behaviour greatly depend on the social climate. Our analysis revealed that the impact of completing upper secondary and tertiary education on women’s work-centred preferences is growing hand in hand with the increased negative influence of a conservative social climate. In another words, attaining higher education can significantly reduce the negative impact of a conservative environment on women’s work-centred preferences. The results suggest that education should take centre stage in preference theory, not only as a background variable, but also as a mechanism in which women’s increased opportunities to attain education lead directly to their opportunity choose between work and family preferences.

Consequently, this means that the uncompromising critique of Hakim’s theory according to which family and work preferences succumb almost exclusively to social constraints rather than based on their own values, is not supported by European data. However, our results parallel Kan’s (2007) revision of preference theory in finding that gender role attitudes and women’s participation in the labour market reciprocally impact each other. We therefore confirm that the roles of individual and societal factors in shaping women’s preferences are more balanced than acknowledged by radical critics of Hakim’s preference theory. Similarly, women pursue education on the basis of educational and occupational aspirations, and education in turn crystallises those aspirations into the likelihood of holding work-centred preferences, particularly in more conservative societies where career-oriented women face obstacles to fulfilling their professional aspirations. As growing numbers of women complete university education, social pressures are likely to decline further, along with the effects of those pressures on women’s life preferences.

Notes

1. The main questionnaire of ESS2 is available at: www.europeansocialsurvey.org/docs/round2/workforce/ESS2_source_main_questionnaire.pdf. Portrait value questions (HF1A to HF1U for men, HF2A to HF2U for women) are in the supplementary questionnaire www.europeansocialsurvey.org/docs/round2/fieldwork/ESS2_source_supplementary_questionnaires.pdf

2. The algorithm is also available on the ESS project pages: www.europeansocialsurvey.org/docs/methodology/ESS1_human_values_scale.pdf
References


Further reading


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