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The role of family policy institutions in explaining gender-role attitudes: a comparative multilevel analysis of thirteen industrialized countries

Ola Sjöberg*, *Stockholm University, Sweden*

Summary This article examines the role of institutionalized family policy in structuring attitudes towards female labour force participation in 13 industrialized countries. Two different perspectives on explaining the role of family policy institutions are distinguished. According to the first perspective, gender-role attitudes will differ cross-nationally according to the capacity of family policy institutions to reconcile work in the home with work in the paid labour force. According to the second perspective, institutions such as family policies can give rise to a certain collection of norms regarding the 'proper' role of women in society. Cross-national variation in family policies will, according to this perspective, have important implications for gender-role attitudes primarily because it will affect what is seen as normatively appropriate behaviour, rather than affecting the returns expected from alternative choices. The empirical analysis, using multilevel regression techniques on data from the International Social Survey Programme (ISSP), indicates that variations in family policy models can contribute significantly to our understanding of cross-national variations in gender-role attitudes. It is also shown that the way gender-role attitudes are measured and conceptualized can have important implications for how cross-national differences in these attitudes are explained.

Key words attitudes, family policy, gender, multilevel analysis

Résumé Cet article analyse le rôle de la politique familiale institutionnalisée dans la structuration des attitudes face à la participation des femmes au marché du travail dans 13 pays industrialisés. Nous distinguons deux perspectives différentes pour expliquer le rôle des institutions de la politique familiale. Selon la première, les attitudes différeront selon la capacité des institutions de la politique familiale à réconcilier le travail à la maison avec celui payé. Selon la seconde perspective, les institutions telles que la politique familiale peuvent faire émerger un certain nombre de normes concernant le rôle «approprié» de la femme en société. Les variations entre Etats dans les politiques familiales ont, selon cette perspective, d'importantes implications pour les attitudes en ce qui concerne le rôle lié au genre principalement parce que cela affecte ce qui est considéré normativement comme un comportement adéquat, plus qu'affectant les bénéfices attendus de choix alternatifs. Les analyses empiriques, utilisant des techniques de régression multi-niveaux à partir des données du Programme d'enquête social international montrent que les variations dans les modèles de politique familiale contribuent de manière significative à notre connaissance des variations entre pays. Nous montrons aussi que la manière dont les attitudes en ce qui concerne le rôle lié au genre sont conceptualisées et mesurées peut avoir des implications importantes dans l'explication des différences entre pays.

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Introduction

Traditional gender-roles have been increasingly contested during the postwar period. Perhaps the most important challenge to the traditional division of labour between men and women in the industrialized world is the increase in women's labour force participation. Parallel to this development, most countries have introduced family policy measures that not only have influenced the actual labour force participation of both women and men, but in their institutional arrangements also reflect normative views about the roles of women and men on the labour market and within the family sphere.

The changing nature of the social division of paid and unpaid work between men and women has brought traditional beliefs and orientations towards family and work into question. Although a number of studies have shown that there has been increasing acceptance of non-familial roles for women (see e.g. Thornton and Freedman, 1979; Cherlin and Walters, 1981; Dex, 1988; Lu and Mason, 1988; Scott et al., 1996), this development has also varied substantially between nations, and important differences still exist between countries regarding attitudes towards women's labour force participation (see e.g. Alwin et al., 1992; Scott et al., 1998; Knudsen and Wærness, 2001) as well as other aspects of women's social roles (see e.g. Ester et al., 1994). However, few researchers have tried to explain these differences in a systematic way. In the analysis of cross-national differences in gender-role attitudes, a common strategy has been to estimate country-specific effects (for example by the use of country-dummies in multivariate analysis) which then have served as a basis for explaining these differences. Whereas this strategy can confirm (or reject) the existence of significant cross-national differences in attitudes and values, it does not provide much basis for explaining these differences. Since no attempt is made to specify the macro-level factors believed to be at work, the country-specific effects found are empty in

the sense that the researcher is free to fill them with the content he or she desires.

The point of departure for this article is that in order to enhance our knowledge of the determinants of cross-national differences in attitudes and values, we need to start with a systematic conceptualization of the relevant institutional differences between countries as well as with theoretically informed hypotheses of how these differences might influence not only people's behaviour and life experiences but also, directly or indirectly, their attitudes and values. Against this background, the purpose of this article is to examine the role of one set of macro-social institutional structures, namely family policy institutions, in explaining cross-national patterns and differences in gender-role attitudes, and more specifically attitudes relating to female labour force participation.

The conceptualization and measurement of family policy institutions is inspired by the work done by Korpi (2000), who has argued that family policy institutions can be characterized as mainly directed towards the support of either a nuclear family, especially one of the single-earner type, or as supporting (and enabling) married women's work and thus a dual-earner family. This characterization of family policy institutions is of particular interest when trying to understand cross-national differences in gender-role attitudes, since it reflects both the goals of major social and political actors and the extensiveness and character of institutionalized policies of potential importance for gender-roles. This understanding of institutionalized family policies will serve as a basis for discussing and formulating more precise hypotheses regarding cross-national differences in attitudes towards female labour force participation, which will subsequently be tested on 13 industrialized countries included in the 1994 International Social Survey Programme (ISSP) module 'Family and Changing Gender Roles II'.¹ Analyses will be performed using multilevel regression, which is the most appropriate kind of multivariate technique when we have

reason to believe that the variation in the dependent variable (gender-role attitudes) arises from different levels of analysis (in this case between as well as within countries).

Family policy institutions

Different social actors have exercised central roles in creating institutions relating to social and family policy. Institutionalized religion, in the form of the Catholic Church and different Protestant churches, has historically been a powerful social force guiding people's lives, not least in the formation of norms and ideologies relating to the family. Both Protestant and Catholic thinking has established the ideal role for women in acting as faithful and supportive 'proper wives'. Hamilton (1984) notes the effect of Protestant thinking in assigning 'unprecedented ideological importance' to the home and the family, a domestic ideology which enabled working wives and mothers to be presented as unnatural and immoral (Hall, 1979). In a number of papal encyclicals the Catholic social doctrine has been formulated, a doctrine whose core is the principle of subsidiarity: the state should not engage in social problems before the family, the Church, and voluntary organizations have failed to solve these problems (Borchorst, 1994). According to this doctrine, the family is regarded as the basic social unit in society, and although female employment is not seen as altogether negative, women's family obligations are generally considered to take higher priority in the case of a conflict between maternal and extra-familial obligations (Haller and Rosenmeyer, 1971). In essence, the Catholic social doctrine is opposed to public commitment to care for dependent persons. If the state and its institutions take over this responsibility, it will deprive the family of its functions. Above all, motherhood is praised as women's natural vocation.

Whereas both Catholic and Protestant ways of thinking have, at least partly, shared the same traditional ideal of family life, the

Catholic social doctrine has been more influential in terms of policy influences. This might in part be due to higher levels of secularization in countries dominated by Protestant churches (Schmidt, 1993), but above all it is due to the fact that the Catholic social doctrine has been the ideological foundation for most Christian Democratic parties in Europe (Borchorst, 1994). The importance of this doctrine is reflected in the dominance of a family policy model that presumes that the wife has the primary responsibility for caring and reproductive work within the family and only enters paid work on a temporary basis as a secondary worker. The gender asymmetries of the traditional family are seen as functionally complementary, and the nuclear family is seen as a social institution that should be protected from too much state intervention (Dahlström, 1989). The uninterrupted possession of power of Christian Democratic parties is not a necessary condition for sustaining the dominance of a family policy founded in the Catholic social doctrine. There is a substantial likelihood that a left-wing government in a Catholic environment would face major conflicts with the Catholic Church, and probably significant losses in popularity, if it were to try and address what are seen as imbalances between women and men in the labour market and within the family sphere (Schmidt, 1993).

The family policy model based on Catholic social doctrine is often contrasted with a model that encourages women's labour force participation and enables parents, men as well as women, to combine parenthood with paid work. Protestant-dominated nations, and above all those dominated by left-wing governments, have gradually come to regard gender equality as a condition for gender liberation, where gender liberation should be understood as the liberation of both women and men from traditional roles. This has manifested itself in policy measures that lessen the constraining effects of women's responsibilities in the family so as to enable work outside the home (Ferrarini, 2003). Moreover, historically Protestant nations dominated by left-

wing governments (i.e. most Nordic countries) have also tended to give more weight to a full employment policy stance since the first oil crisis, a policy that has facilitated the integration of women into the labour force (Schmidt, 1993).

Korpi (2000) has distinguished between three ideal-typical models of gendered welfare state institutions of relevance to the above discussion.² In this typology the distinction between paid and unpaid labour is of central importance, and institutionalized family policy measures are conceived in a two-dimensional space according to what consequences these measures have for the distribution of paid and unpaid work in the family and in society. More specifically, the categorization of social policy measures is based on whether a specified policy primarily contributes to the general support of a nuclear family (especially one of the single-earner type), or whether it is likely to enable and promote married women's work and thus a dual-earner family. Thus, the *general family support* model is based on the presumption that the wife has the primary responsibility for caring and reproductive work within the family and enters paid work on a temporary basis as a secondary earner. In contrast, the *dual-earner support* model encourages women's labour force participation by enabling parents, men as well as women, to combine parenthood with paid work and by attempting to create the conditions for a redistribution of caring work within the family. Countries where neither of the above two policy models is predominant would appear to have chosen to allow market forces to significantly shape gender relations, and these countries are consequently characterized as having a *market oriented* gender policy model.

In the analyses to come, the following indicators (see Appendix for a more detailed description thereof) are used to measure the level of support directed to a dual-earner family: the relative extent of public day-care services for the youngest children (0–2 years of age), of paid maternity and paternity leave, and of public home help to the elderly. These

family policy measures aim to redistribute unpaid work within the family sphere to the paid public sector and/or to redistribute caring work within the family and therefore to allow for the more continuous labour force participation of mothers. As indicators of support directed to a nuclear or single-earner family, the following indicators are used: the levels of child allowances to children under majority age, family tax benefits to an economically non-active spouse and to children, child-care leave benefits, maternity grants, and public day-care services for somewhat older children (from 3 years up to school age). These family policy measures are either formally neutral as regards the labour force participation of women, or directly encourage women to stay at home to care for home and family and to enter paid work only on a temporary basis.

According to these indicators, especially Sweden and (to a somewhat lesser degree) Norway are characterized by high levels of dual-earner support (and medium levels of general family support). Countries characterized by having high levels of general family support (and medium levels of dual-earner support) are Italy, Germany, Austria, and the Netherlands. Australia, Canada, Great Britain, Ireland, Japan, New Zealand and the USA are characterized by having low levels of both dual-earner and general family support.³ However, within the group with this family policy model, Canada and Great Britain have family measures of a sort that makes these countries score relatively high on the dual-earner support dimension.

Family policy institutions and the opportunity structure of women

How, then, can the conceptualization of family policy institutions outlined above help us to understand how orientations and attitudes towards female labour force participation are structured within and, above all, between countries? One way to think about family policy institutions is to consider them

as shaping the opportunity structure of individuals, and perhaps especially of women. It can be argued that demographic as well as social changes over the last several decades have changed the opportunity structure for women regarding participation in paid work (Davis and van den Oever, 1982; Gerson, 1986). Generally (or on average), the benefits of taking on a traditional women's role as homemaker have been decreasing while the opportunity costs, i.e. rewards available from alternatives, have been increasing (Mason et al., 1976; Norris, 1987). Moreover, declining fertility rates and decreased significance of the nuclear family suggests that a full-time role of motherhood is less feasible for women. This also implies that the economic security that used to be attached to the homemaker's role has declined and that many women have entered the labour market out of economic necessity. According to this perspective, differences in orientations and attitudes to labour market involvement among women can be understood in terms of available options and alternatives, as well as in terms of perceptions of the rewards and costs that are associated with these alternatives. The more options available to a woman, the more rewards she foregoes by maintaining the traditional homemaker role, and the more likely it is that she will reject the traditional homemaker role and express attitudes in support of more egalitarian gender-roles (Morgan and Walker, 1983).

One important determinant of the alternatives and options available to women and the rewards tied to these options is educational attainment. A high educational attainment increases women's employment options in terms of better potential access to psychologically rewarding jobs, and a more highly educated woman can often also command a higher market wage. Hence, since educational attainment is associated with both option availability and the rewards that are tied to market work options, it might be expected that women with higher formal education would hold more positive attitudes towards women's labour force participation. In con-

trast, less well-educated women, whose occupational qualifications often limit them to poorly paid or relative routine jobs, might value the possibility of concentrating on household and child care more highly, and so they might also hold more negative attitudes towards female labour force participation.

However, while education can be seen as one of the factors influencing the alternatives individuals face on the labour market, the other side of the coin is the extent to which women have the possibility to take advantage of these alternatives. The fundamental 'supply-side characteristics' that distinguish female workers – namely their primary responsibility for social reproduction – mean that their labour force participation to a large extent depends on their access to institutions (public or private) which can reconcile work inside the home and work in the paid labour force. Moreover, if women feel that employment is incompatible with being a good mother, they may feel considerable role-conflict and strain. Family policy institutions that reconcile women's work and family obligations have the potential in various degrees to abate this role-conflict.

Consequently, family policy institutions can be seen as means to ease the tension between paid work and the family obligations of women, and orientations towards labour force participation among women can consequently be regarded as being shaped by public policies that reconcile work inside the home and work in the paid labour force. Women who are supportive of sex role egalitarianism can therefore be expected to be those who have alternative rewards available to them, but also access to the institutional opportunities to take advantage of these rewards. Thus, it can be hypothesized that the effect of a given level of educational attainment will be larger in countries where family policies support and/or enable the labour force participation of women, i.e. in countries which score highly on the dual-earner support dimension of institutionalized family policies. Furthermore, since it is reasonable to assume that, in all coun-

tries, women who are more highly educated probably have greater access to, or greater opportunities to utilize, child-care facilities other than publicly provided ones (for example privately arranged) than less well-educated women, it can be hypothesized that the (cross-level) interaction effect between a high level of dual-earner support and education will be especially strong for less well-educated women.⁴

Social norms and family policy institutions

From the perspective focusing on the relationship between family policy institutions and gender-role attitudes outlined above, preferences were seen as exogenous and actors as instrumentally oriented towards the attainment of these preferences. It was hypothesized that over time the value assigned to labour market participation has increased and that the benefits following from adherence to the traditional homemaker role have decreased. The options and constraints individuals are facing, i.e. the prospects of taking advantage of these changed alternative costs, were then hypothesized to influence gender-role beliefs and orientations within and between countries.

However, an alternative way of looking at the role of family policy institutions in the context of gender-role beliefs and attitudes is to consider preferences to be, at least partly, endogenous to these institutions. In other words, these institutions might not only affect the strategic and rational calculations of individuals, but also their very preferences and beliefs. This does not imply that action cannot be, or is not, purposive, goal-oriented and rational, but rather that what an individual will see as 'rational action' is in itself socially constituted. 'Rational action' might not only mean the course of action that entails the greatest material gain, but also the course of action that is seen as most morally justifiable. Thus, without denying that human behaviour often is rational and purposive and that insti-

tutions provide the options and constraints which frame action, this perspective sees individuals as deeply embedded in a world of institutions that have the potential to affect their very identities, self-images and orientations towards the world (March and Olsen, 1984; 1989; Thelen and Steinmo, 1992; Rothstein, 1998).

Thus, institutions such as those structured through family policies can be understood as normative orders which influence and structure world views – in this context, views regarding the 'proper' role of women in society and the degree to which the participation of women in the labour market on equal terms with men is seen as something to be desired. As indicated earlier, cross-national differences in the institutional arrangements of family policies reflect fundamental differences in how major societal actors, such as the Church and political parties, have viewed and still view the 'proper' role of both men and women in the labour market as well as within the family sphere. For these actors, it is very cost-effective to invest their power resources in institutions that not only affect people's behaviour by influencing the relative costs and benefits of different courses of actions, but also have the potential to affect the internalized values that guide people's actions. Thus, the fact that institutions such as family policy can affect the prevailing norms in society and thus the very preferences that guide people's actions might not be only a side-effect of these institutions. It could also be considered to be part of a more or less deliberate strategy of societal actors to make the most of the power resources at their disposal.

Following this line of reasoning, it can be argued that countries where institutionalized family policies are directed towards the support of a dual-earner family have tended to support norms that involve the liberation of both women and men from traditional roles (alongside policies that have enabled both parents to participate in paid work). Similarly, it can be argued that countries where institutionalized family policies are directed towards

the support of a single-earner family have also tended to favour norms in support of a nuclear family, primarily of a single-earner type. Also worth remembering is the fact that, since the different dimensions of family policy are measured on continuous scales, we also allow for the possibility of a country's existing family policies to reflect more or less contradictory norms in this area.

Hypotheses, data and research strategy

Based on the perspectives outlined above, two hypotheses regarding cross-national differences in attitudes to female labour force participation in relation to different family policy models can be formulated. First, it can be hypothesized that family policy institutions contain normative elements and expectations on the 'proper' role of men as well as women in society and in the family. This hypothesis implies that on the macro level (after taking into account compositional differences within countries), levels of policy support to a dual-earner family will have a positive effect on attitudes towards female labour force participation, whereas level of support for a nuclear, single-earner family will have a negative effect on these attitudes. Second, it can be hypothesized that family policy institutions will influence how individuals, and perhaps above all women, perceive that they can take advantage of the options and alternatives open to them. This hypothesis implies the existence of a (cross-level) interaction effect between educational attainment and high levels of dual-earner support, an interaction effect that will be especially strong among less well-educated respondents.

An important question when evaluating these hypotheses is whether gender-role attitudes and type and extent of institutionalized family policies are driven by the same underlying thrust, namely the rise in female employment, and whether any possible relationship between family policies and gender-role atti-

tudes will therefore be spurious in nature.⁵ All models testing the macro-level relationship between family policy models and gender-role attitudes will therefore contain a macro-level variable measuring the rate of female labour force participation. Furthermore, the models run on the sample consisting of women only will also contain variables that measure the respondent's labour force participation during different phases of the family life-cycle.⁶

These hypotheses will be tested on the 1994 International Social Survey Programme (ISSP) module 'Family and Changing Gender Roles II'. ISSP is an attempt to create a truly comparative data set on attitudes among the populations of industrialized countries (Davis and Jowell, 1989; Becker et al., 1990). The response rates for the countries included in this article vary from 55 percent in Germany and Great Britain to 77 percent in Australia, with a non-response rate found in the range between 25 to 35 percent in most countries. In all the following analyses, a weighting factor has been used to correct for possible deviations caused by the non-responses.⁷ All results reported refer to models run on the total sample (i.e. both women and men). In addition, all models have been run on a sample consisting of women only, and significant differences in results between the two samples will be commented upon in the text.⁸

For the purpose of examining cross-national variation in gender-role attitudes, multilevel analysis is particularly suited. This mode of analysis is a theoretically and statistically appropriate means of combining different levels of analysis (micro and macro) into a single framework (Snijders and Bosker, 1999). Particularly, multilevel analysis takes into account nested sources of variability, in this case individuals within countries. In this form of complex variability, where there is variability not only between individuals but also between countries, there is a considerable likelihood that wrong conclusions will be drawn if either of these sources of variability is not correctly assessed, as is often done by employing for example OLS-regression techniques.⁹

The primary focus of this article is to explain variability in gender-role attitudes at the macro level in terms of differences in institutionalized family policies. However, in order to do this, variation at the micro level (i.e. between individuals) also needs to be taken into account. In the analyses that follow, age, sex, education, religiosity and the work experience of the respondent's mother are used as independent variables at the micro level. All these variables have in earlier research been shown to be of importance in accounting for the variation in attitudes towards female labour force participation between individuals. Education will be measured by a continuous variable ranging from 1 to 7.¹⁰ The reason for using a continuous variable to measure education, as opposed to the more common division into categories (primary, secondary and university education), is that in the multilevel analyses to come I want to test the random effect of education, and to specify the random effect of two educational variables would put much strain on a data set comprising only 13 macro units.¹¹ Moreover, although it might be theoretically more reasonable to use categorical variables to measure education, treating education as a continuous variable actually improves the fit to the data.¹²

Data on religious affiliation as well as religiosity, the latter measured by the question 'How often do you attend religious services?', is recombined into five dummy variables that distinguish between: 'strong' Catholics/Protestants, attending religious services several times a year or more often; 'weak' Catholics/Protestants, attending religious services less frequently than several times a year or never; and the category 'others' or adherents of all other religious denominations, irrespective of how often they attend religious services. Also included in the models is a dummy-variable that measures the working experience of the respondent's mother. This variable is based on the question 'Did your mother ever work for pay for as long as one year after you were born and before you were 14 years old', where the value 1 indicates an affirmative answer.

The ISSP module 'Family and Changing Gender Roles II' contains a battery of items regarding beliefs and orientations towards female labour force participation. Although it has been claimed that a majority of these items form one distinct dimension across nations (Haller and Hoellinger, 1994; Knudsen and Wærness, 1999; 2001), others have argued that there are theoretical as well as empirical reasons to make a distinction between different types or sub-dimensions of attitudes towards female labour force participation (Alwin et al., 1992; Scott and Duncombe, 1992; Scott et al., 1996). In this article, I will therefore use both a single scale comprised of five items and two 'subscales' derived from this composite scale (see Appendix for reliability measures for these indexes). The composite scale, henceforth named 'Attitudes towards female labour force participation', includes five items on which respondents have been asked to indicate their degree of agreement or disagreement:¹³

- 1 'A preschool child is likely to suffer if his or her mother works.'
- 2 'All in all, family life suffers when the woman has a full-time job.'
- 3 'Being a housewife is just as fulfilling as working for pay.'
- 4 'A man's job is to earn money; a woman's job is to look after the home and family.'
- 5 'It is not good if the man stays at home and cares for the children and the woman goes out to work.'

The first of the two 'subscales' separated from a composite scale with all five items, hereafter named 'Consequences of women working', is based on items 1 and 2, and captures principally opinions on possible conflicts between a woman's job and the needs of the family. The second scale, henceforth named 'Norms on gender-roles', is based on items 3–5, and captures mainly normative views on the broader societal division of work between men and women.

Attitudes towards female labour force participation: empirical results

The first step of the multivariate analysis involves the estimation of a series of random intercept models, in which the regression lines of the macro units (i.e. countries) are allowed to have different intercepts but are forced to have the same slopes (Table 1). The dependent variable in these models is the 'Attitudes towards female labour force participation'-index (i.e. the composite attitude scale). However, none of the effects on the micro level is altered to any significant degree by whether these models are estimated using either of the two 'subindexes' of the broadest composite scale on attitudes to women's labour.

First an 'empty model' (i.e. a model without any explanatory variables) was estimated, and to this model the micro-level variables were

subsequently added. All the coefficients of these variables have the expected sign: women have a significantly higher coefficient than men; respondents with a mother who has worked have a significantly higher coefficient than respondents whose mother stayed at home; level of educational attainment has a significantly positive effect; and age has a significantly negative effect. Interesting to note is that the respective effects of being a 'strong' Catholic and a 'strong' Protestant are both negative, and of roughly equal size, whereas the effects of being a 'weak' Catholic or Protestant are not significant. This might be seen as a confirmation of the earlier notion that Catholic and Protestant thinking has, at least partly, shared the basic traditional ideal of family life. The fit of the models (as measured by the log likelihood-value) significantly increases as these individual-level predictors

Table 1 Micro-level determinants of attitudes towards female labour force participation (t-values within parentheses)

| | <i>Model 1</i> | <i>Model 2</i> | <i>Model 3</i> | <i>Model 4</i> | <i>Model 5</i> | <i>Model 6</i> |
|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Constant | 15.490*** (40.062) | 17.584*** (46.683) | 17.902*** (50.618) | 17.303*** (48.145) | 13.857*** (43.639) | 13.756*** (29.313) |
| Sex (Men = ref.) | | 0.828*** (14.149) | 0.875*** (14.693) | 0.870*** (14.960) | 0.966*** (16.979) | 0.979*** (17.236) |
| Age | | -0.092*** (51.556) | -0.088*** (47.769) | -0.081*** (43.169) | -0.070*** (37.265) | -0.070*** (37.090) |
| Religion (other = ref.) | | | -1.023*** (9.764) | -0.951*** (9.113) | -0.784*** (7.688) | -0.744*** (7.304) |
| Strong Catholic | | | | | | |
| Weak Catholic | | | -0.349** (2.819) | -0.291* (2.497) | -0.076 (0.498) | -0.044 (0.382) |
| Strong Protestant | | | -0.842*** (8.228) | -0.776*** (7.609) | -0.744*** (7.476) | -0.727*** (7.315) |
| Weak Protestant | | | -0.095 (0.978) | -0.076 (0.781) | 0.134 (1.410) | 0.147 (1.547) |
| Mother working (no = ref.) | | | | 0.840*** (13.433) | 0.831*** (13.592) | 0.826*** (13.545) |
| Education | | | | | -0.646*** (28.166) | -0.667*** (9.479) |
| Level-1 variance | 16.935 | 14.434 | 14.304 | 14.149 | 13.505 | |
| Level-2 variance | 1.929 | 1.787 | 1.537 | 1.565 | 1.007 | |
| Intra-class correlation coeff. (* 100) | 10.2 | 11.0 | 9.7 | 9.9 | 6.9 | |
| Deviance | 93532.4 | 90898.4 | 90747.3 | 90567.8 | 89794.1 | 89710.8 |

Notes: * = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.01 level.

Table 2 Macro-level determinants of different aspects of attitudes towards female labour force participation (t-values parentheses)

| | 'Attitudes towards female labour force part.'-index | | 'Consequences of women working'-index | | | 'Norms on gender-roles'-index | | |
|---------------------------------------|---|-------------------|---------------------------------------|--------------------|-----------------|-------------------------------|-----------------|------------------|
| Degree of general family support | -0.24 (1.91) | -0.32** (3.82) | -0.18** (3.34) | -0.21*** (4.73) | -0.05 (0.53) | -0.13 (1.82) | | |
| Degree of dual-earner support | | 0.32* (2.34) | 0.41** (4.11) | 0.12 (1.48) | 0.16* (3.22) | | 0.25* (2.65) | 0.30** (3.42) |
| Female labour force participation | 0.03 (1.08) | -0.02 (0.51) | -0.02 (0.90) | 0.02 (1.21) | -0.01 (0.17) | -0.01 (0.50) | 0.02 (0.75) | -0.02 (0.70) |
| <i>Change in deviance^a</i> | | | | | | | | |
| Only family-policy variables | 2.48 | 4.89* | 13.52** | 7.09** | 2.34 | 15.42*** | 0.16 | 5.40* |
| Full model | 3.56 | 5.14 | 14.29** | 8.47* | 2.37 | 15.66** | 0.69 | 5.87 |
| | | | | | | | | 8.38* |

Notes: * = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.001 level.

^a Compared to model without macro-level variables (Model 6 in Table 1).

are added step by step.¹⁴ The country-level variance, as measured by the intra-class correlation coefficient, is around 10 percent in the 'empty model', indicating that there is substantial variation between countries as regards attitudes towards female labour force participation.¹⁵ The intra-class correlation coefficient does not undergo any more substantial decrease (from around 10 to around 7 percent) until educational attainment is controlled for.

The multilevel framework also allows testing whether the effect of micro-level variables differs between countries, by (in addition to random intercepts) also estimating random slopes (i.e. allowing the effects of the micro-level variables to differ between countries). Initially, all the micro-level variables were allowed to have random slopes. The variable for which permitting a random slope improves model fit the most is educational attainment.¹⁶ Thus, there seems to be some empirical evidence to suggest that the effect of the respondent's educational attainment differs according to national context.

In the second step of the analysis, the macro-level variables measuring the two dimensions of institutionalized family policies was added to the final micro-level model (Model 6, with educational attainment assigned a random effect), both separately and

together in the same model (Table 2). In addition, all models control for the rate of female labour force participation. These analyses were performed on the index used in the micro-level analyses ('Attitudes towards female labour force participation'-index) as well as the two 'subdimensions' that were extracted from this composite index ('Consequences of women working'-index and 'Norms on gender-roles'-index).

With the 'Attitudes towards female labour force participation'-index used as the dependent variable, both macro-level variables have coefficients with the expected sign. The degree of support to a dual-earner family has a positive effect on attitudes towards female labour force participation, while the degree of support to a nuclear, single-earner family has a negative effect on these attitudes. However, only the macro-level variable that measures support to a dual-earner family is significant, also in terms of the improvement of the models' fit to the data. When both measures of institutionalized family policies are included in the same model, they are both significant and there is a highly significant improvement of the models' fit to the data.¹⁷ The intra-class correlation coefficient for Model 5 (with education assigned a fixed effect) was 6.9. The comparable intra-class

coefficient for this model, which includes both macro-level measures of institutionalized family policies, is 2.2 (not shown). Thus, the variance in gender-role attitudes between countries is reduced by over 300 percent when these two macro-level variables are included in the model.

When the two 'subdimensions' of gender-role attitudes are used as dependent variables, an interesting pattern emerges. The degree of general family support has a significant negative effect on attitudes measured by the 'Consequences of women working'-index, and the inclusion of this variable also significantly improves the model's fit to the data. However, this variable has no significant effect on the 'Norms on gender-roles'-index. For the macro-level variable that measures the degree of support to a dual-earner family, the situation is largely reversed: its effect is mainly on the 'Norms on gender-roles'-index, whereas its effect on the 'Consequences of women working'-index is only present in the model where both macro-level variables are included.¹⁸ Thus, the decomposition of the dependent variable into different attitudinal dimensions produces a more complex picture of the effect of the macro-level variables. Whereas the degree of support to a single-earner family primarily seems to affect attitudes relating to the family and child-welfare consequences of women's paid work, the degree of support to a dual-earner family seems principally to influence attitudes relating to the societal division of labour between men and women.¹⁹ Also important to note is the fact that the macro-level variable measuring female labour force participation rate has no significant effect on gender-role attitudes in any of the models.²⁰

The final analysis addresses the question of whether the effect of educational attainment differs in accordance with the contextual factors that may adhere in institutionalized family policies. To recapitulate, our hypothesis stated that educational attainment would interact with institutionalized family policies insofar as dual-earner policies strengthen the

effect of education. This interaction effect would be especially strong for respondents with low levels of educational attainment. It has already been demonstrated that the random effect of educational attainment is significant, thus indicating that the effect of respondents' educational attainment on attitudes towards female labour force participation differs across national contexts. The question, then, is to what degree institutionalized family policies capture these differences in national contexts.

To test this hypothesis, nine cross-level interaction variables between different levels of support for a dual-earner family (low, medium and high) and different levels of educational attainment (primary, secondary and university education) were constructed, where the interaction variable between primary education and low levels of support for a dual-earner family was used as reference category in subsequent analyses. In this categorization of countries, Sweden, Norway, the Netherlands, Canada and Great Britain are defined as having high levels of dual-earner support; Italy, Germany, Austria and Australia as having medium levels of dual-earner support; and Ireland, New Zealand, Japan and the USA as having low levels of dual-earner support. Countries defined as having low levels of support for a dual-earner family have an average of -1.36 on the index measuring this dimension of family policy. The corresponding average for medium levels of dual-earner support is -0.78 and for high levels of dual-earner support 1.53. As expected, there is also a curvilinear relationship between this dimension and the other family policy dimension, indicating support for a single-earner family: countries defined as having low levels of dual-earner support also have the lowest average (-1.48) on the index measuring support for a single-earner family, whereas countries defined as having medium levels of dual-earner support have the highest value (1.28) on this index. Countries with high levels of dual-earner support fall somewhere in between with an average of -0.07 on the

Table 3 The effect of cross-level interaction variables between education and degree of support to a dual-earner family on attitudes towards female labour force participation (t-values within parentheses)

| <i>Level of dual-earner support</i> | | <i>Level of education</i> | | <i>Unstandardized beta-coefficients</i> |
|--|--------|---------------------------|------------|---|
| Low | | Primary | | <i>ref.</i> |
| Low | | | Secondary | 0.021 (0.934) |
| Low | | | University | 0.793 (1.946) |
| | Medium | Primary | | -0.322 (0.667) |
| | Medium | | Secondary | 0.259 (0.558) |
| | Medium | | University | 0.426 (0.836) |
| | High | Primary | | 2.287*** (4.405) |
| | High | | Secondary | 1.779*** (3.634) |
| | High | | University | 1.336* (2.549) |
| Deviance | | | | 89676.9 |
| Change in deviance from model without cross-level interactions | | | | 33.4*** |

Notes: * = significant at 0.05 level, ** = significant at 0.01 level, *** = significant at 0.01 level.

index measuring support for a single-earner family.

These nine interaction variables were added to Model 5 (see Table 1). In Table 3, only the results for the model with 'Attitudes towards female labour force participation'-index as the dependent variable are displayed. Possible differences in the results when the two other indexes are used as dependent variables will be commented upon in the text.

These results seem to support the hypothesis that there is a (cross-level) interaction effect between levels of support for a dual-earner family and educational attainment, and that this interaction effect is especially strong for low levels of educational attainment. The (positive) effect of a given level of educational attainment is stronger in countries characterized by comparatively high levels of support for a dual-earner family. In these countries, all three levels of educational attainment have a positive coefficient (as compared to the refer-

ence category), with the coefficients for both primary and secondary education being significant at the 0.1 percent level and the coefficient for university education being significant at the 5 percent level. Furthermore, in countries characterized by having high levels of dual-earner support, the (positive) coefficient of primary education is larger than the (positive) coefficient of both secondary and university education. This suggests that the (cross-level) interaction effect between high levels of dual-earner support and education is especially strong for respondents with low levels of educational attainment. None of the other interaction effects (i.e. between low and medium levels of dual-earner support and different levels of educational attainment) is significantly different from the reference category.²¹

It can be argued that the hypothesis being tested in Table 3, that institutionalized family policies will influence how individuals perceive that they can take advantage of the

options and alternatives open to them, first and foremost applies to women. The same model as the one reported in Table 3 was therefore estimated on a sample consisting of only women, with almost identical results: both primary and secondary education in countries defined as having a high level of dual-earner support have a positive and significant effect (with primary education having a larger coefficient than secondary education). However, in this model the effect of university education in these countries is not significant.

In a sample of only 13 countries, the way in which countries are grouped into categories (in this case low, medium and high levels of support for a dual-earner family) when creating these kind of cross-level interactions can potentially have substantial effects on the results. A series of sensitivity tests regarding the effect of the grouping of countries was therefore performed. These tests indicate that the results reported in Table 3 are not sensitive to the way in which countries are grouped in levels of support for a dual-earner family.²²

Conclusions

Family policy institutions affect both the possible ways in which individuals can pursue their private lives and how they look upon the 'proper' role of both women and men in society. This makes such institutions a 'prime explanatory candidate' in accounting for cross-national variation in gender-role attitudes. The results in this article largely confirm this view. Family policy institutions, as they are conceived of in this article, seem to contribute significantly to understanding cross-national variation in gender-role attitudes. Respondents in countries where family policies are directed towards the support of a dual-earner family have significantly more positive attitudes towards female labour force participation, and there is also a significant cross-level interaction effect between levels of

dual-earner support and education. This does not mean, however, that taking into account variation in family policy institutions is sufficient to reach a full understanding of how and why gender-role attitudes vary between countries. Future research into this area should concentrate upon how family policy institutions interact with other societal institutions to create the total environment in which people's actions are framed and their preferences and attitudes shaped.

A firm conclusion from earlier studies of gender-role attitudes is the importance of socio-economic factors (such as education) in accounting for individual-level variation in these attitudes. The results from this article indicate that these factors' impacts are modified by specific institutional contexts. This also underlines the importance of using statistical techniques that can take these contextual factors into account in a correct way. The results from this article also strongly suggest the need for treating attitudes as the multifaceted concept they really are, not least in a comparative perspective. In this article, this idea was incorporated in a rather modest way by decomposing the dependent variable into different attitude scales. Although this is a rather limited way of recognizing the complex nature of attitudes, the fruitfulness of the approach is clearly demonstrated in this article. By recognizing that individuals can hold at least partly contradictory attitudes, we can also recognize the complex link between the values and orientations individuals hold and the reality in which they live.

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Notes

- 1 The countries included in the analyses are Australia, Austria, Canada, Germany, Great Britain, Ireland, Italy, Japan, the Netherlands, New Zealand, Norway, Sweden, and the United States.
- 2 For an overview of gender-sensitive welfare state typologies, see Arts and Gelissen (2002). For a discussion and critique of Korpi (2000), see Hobson (2000), Quadagno (2000), Shalev (2000) and Shaver (2000).
- 3 This characterization of countries is almost identical to that of Korpi (2000). The only exception is Ireland, which Korpi (2000) characterizes as having a general family support model, albeit with low levels.
- 4 An alternative hypothesis would in this context be that the absence of institutional opportunities raises awareness of, and support for, gender equality. This would lead us to expect higher levels of support for egalitarian gender-roles in countries characterized by high levels of general family support, and also an interaction effect between educational attainment and levels of general family support.
- 5 Previous research gives no clear answer to this question. Although an effect of labour force participation on gender-role attitudes is commonly found, Haller and Hoellinger (1994: 104–5) conclude that ‘women’s labour force participation is by no means always caused by and does not always lead to more egalitarian views of gender-roles’. Regarding the relationship between female labour force participation and type and extent of institutionalized family policies, Ferrarini (2003), using basically the same indicators of family policy models as those used in this article, finds no significant relationship, whereas Huber and Stephens (2000) find a significant effect of female labour force participation rate on the provision of welfare state services.
- 6 The ISSP-module contains questions on whether the respondent has worked full time, part time or stayed at home: (i) before having children; (ii) with preschool children; (iii) when the youngest child started school; (iv) when children left home. Since the definition of part time probably varies considerably between countries as well as between respondents within countries, these variables were transformed into dichotomous variables distinguishing between those who stayed at home and those who worked (part or full time) during different phases of the family life-cycle. At the micro level, items (ii) and (iii) are used to control for female labour force participation; item (i) shows very little cross-national variation and the use of item (iv) would restrict the age-span of the sample too much). At the macro level, the variable measuring female labour force participation was constructed by aggregating these micro-level variables, measuring the proportion of women who worked (part or full time) during periods (ii)–(iv). This macro-level variable has a correlation of 0.915 with the OECD figures on female labour force participation (measured as an average for the period 1976 to 1994).
- 7 See International Social Survey Programme (2003) for a description of how the weighting factor was calculated for each country.
- 8 The results from these models can be obtained from the author upon request.
- 9 For the multilevel analyses in this article the software program HLM (version 5.01) has been used.
- 10 The coding for this variable is: 1 = none/still at school, 2 = incomplete primary education, 3 = completed primary education, 4 = incomplete secondary education, 5 = completed secondary education, 6 = incomplete university education, 7 = completed university education.
- 11 The estimation of two random slopes (three levels of educational attainment minus a reference category) requires the estimation of an additional 5 parameters at the macro level (the variances of the two random slopes and the covariance’s between the two random slopes with each other and with the random intercept), whereas treating education as a continuous variable requires the estimation of only 2 additional parameters at the macro level (the variance of the random slope and the covariance between the random slope and the random intercept).
- 12 However, there are no differences in the sign or significance of the micro-level variables between models where education has been specified as a continuous or as a categorical variable.
- 13 The answers to the questions included in this index have five options (‘strongly agree’, ‘agree’, ‘neither agree or disagree’, ‘disagree’, and ‘strongly disagree’) and were recoded so that the highest value (5) on each question indicates a more liberal stance on gender-role issues.
- 14 The improvement in a model’s fit to the data can be assessed by the deviance test, where the deviance of a model is defined as minus twice the natural logarithm of the likelihood. The difference in deviance between two models can be used as a test statistic having a chi-squared distribution with the difference in the numbers of parameters between the models as degrees of freedom (Snijders and Bosker, 1999: 89).
- 15 The intra-class correlation coefficient is calculated by dividing the variance at the higher level (in this case between countries) with the sum of

- the variance at the higher level and the variance at the lower level (in this case between individuals within countries).
- 16 For age, the improvement in deviance for the model with a random slope is 78.7, which is highly significant with 2 degrees of freedom. This supports the notion put forward by Knudsen and Wærness (2001) that the effect of age differs between national contexts, although their conclusion was based on only three countries (Sweden, Norway, and Great Britain). None of the models where the other micro-level predictors in Model 4 was allowed to have random slopes underwent any significant improvement in deviance.
- 17 The colinearity between these two macro-level variables is modest, with a correlation of 0.17.
- 18 In a sample of only 13 countries, the results can potentially be very sensitive to influential cases (countries) at the macro level. To test for this, dummy variables representing countries were included one at a time in the models in Table 2. In none of these models did the results in Table 2 change (no coefficient changed sign and no significant effect lost its significance). The results from these sensitivity tests can be obtained from the author upon request.
- 19 The only significant difference between the results presented in Table 2 and the results from the same models run on a sample consisting of only women, is that the effect of the level of dual-earner support becomes even more significant (from significant on the 5 percent level to significant on the 1 percent level) in the model with 'Consequences of women working'-index as dependent variable and both macro-level variables measuring family policy institutions are included in the same model.
- 20 The variable that measures female labour force participation rate is not significant when it is the only macro-level variable in the model. When variables measuring whether the respondent worked with pre-school children and when the youngest child started school (see Note 6) are included in the model, these micro-level variables have a highly significant positive effect in all three models (i.e. with the three different dependent variables), but the inclusion of these variables in the models reported in Table 2 does not change the effect of the macro-level variables measuring family policy models.
- 21 Separate analyses of the two 'subindexes' confirm the results reported in Table 3. For the 'Norms on gender-roles'-index, the results are identical to the results obtained from the composite index. For the 'Consequences of women working'-index, the only differences (as compared to the results reported in Table 3) are that the interaction effect between primary education and medium levels of dual-earner support is significantly negative, while the interaction effect between high levels of dual-earner support and university education is not significant (although positive).
- 22 The first series of tests involved changing the size of each category by adding or subtracting a single country. These models had the same pattern of effects as the model in Table 3, with all three educational levels having a significantly larger effect in countries defined as having high levels of dual-earner support, with primary education having the largest effect, followed by secondary education. The only significant difference was that in some of these models, secondary and university education in countries characterized as having low levels of support for a dual-earner family also had a small positive effect. A number of models were also tried with only Norway and Sweden characterized as having high levels of dual-earner support, where the borders between medium and low levels of dual-earner support were defined differently. Furthermore, these models had the same effects patterns as the model in Table 3. The results from these sensitivity tests can be obtained from the author upon request.

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Appendix: measures of dual-earner and general family support

All replacement levels (paid maternity and paternity leave, child allowances, family tax benefits, child-care leave benefits and maternity grants) are calculated for a standardized household where a woman gives birth to her second child on 1 January, and where the first child is assumed to be five years old at the time of the second child's birth. The mother has been engaged in paid work throughout the two years preceding birth of the second child.

The mother has earned an average production workers wage (APWW) during this period. The husband is at the time of confinement also employed full time earning an APWW. It is assumed that the mother in the family does not work during the first year of the newborn child's life. All benefits are estimated net of taxes and related to an APWW. Public day-care services are expressed as the number of places available in relation to the number of children in this age group. Public home-help is expressed as the proportion of persons aged 65 years or older receiving services to help them continue living at home. Data on public day-care services for children and public home-help for the elderly has been provided by Professor Walter Korpi (see Korpi, 2000), and data on parental leave, child allowances, child-care leave benefits and maternity grants have been provided by Tommy Ferrarini (see Ferrarini, 2003), both at the Swedish Institute for Social Research at Stockholm University, Stockholm, Sweden. Data on family tax benefits are from the SCIP-database at the Swedish Institute for Social Research (see Sjöberg, 2000).

Table A1 Reliability measure (Cronbach's alpha) for the indexes used as dependent variables

| | <i>Aus</i> | <i>Ger</i> | <i>GB</i> | <i>USA</i> | <i>Aut</i> | <i>Ita</i> | <i>Ire</i> | <i>Neth</i> | <i>Nor</i> | <i>Swe</i> | <i>NZ</i> | <i>Can</i> | <i>Jap</i> |
|---|------------|------------|-----------|------------|------------|------------|------------|-------------|------------|------------|-----------|------------|------------|
| Attitudes towards female labour force participation | 0.73 | 0.76 | 0.76 | 0.74 | 0.71 | 0.66 | 0.67 | 0.78 | 0.77 | 0.76 | 0.76 | 0.71 | 0.45 |
| Consequences of women working | 0.84 | 0.73 | 0.77 | 0.80 | 0.69 | 0.65 | 0.77 | 0.76 | 0.78 | 0.76 | 0.80 | 0.81 | 0.60 |
| Norms on gender roles | 0.54 | 0.70 | 0.59 | 0.57 | 0.61 | 0.50 | 0.54 | 0.67 | 0.62 | 0.59 | 0.63 | 0.50 | 0.34 |