

Gender Stereotypes in Europe

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Abstract – Gender stereotypes are most often represented in the form of a one-dimensional scale, ranging from a traditional view to an egalitarian view, which does not adequately reflect the complexity of the corpus of representations on gender. Using the 2017 European Values Study, which has a breadth of indicators describing countries in terms of equality between women and men, the contribution of this article is twofold. First of all, it shows that gender stereotypes relating to the separation between the private and professional spheres can be represented in two dimensions, one corresponding to an overall adherence to these stereotypes and therefore pertaining to the dominant approach in the literature, and the other corresponding to an adherence to stereotypes relating to the role of the mother in particular. Then, the article estimates the individual and national factors that determine adherence to those two dimensions and shows that the differences between countries are smaller in the second dimension.

JEL: J16, M12, O52

Keywords: stereotypes, gender, Europe, statistical analysis

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Received in February 2023, accepted in December 2023. Translated from: "Les stéréotypes de genre en Europe".

The opinions and analyses presented in this article are those of the author(s) and do not necessarily reflect their institutions' or INSEE's views.

Citation: Coron, C. (2023). Gender Stereotypes in Europe. *Economie et Statistique / Economics and Statistics*, 541, 33–53. doi: 10.24187/ecostat.2023.541.2106

Gender stereotypes play a central role in inequalities between women and men. In particular, stereotypes influence the behaviour of individuals in relation to their work (Carrère *et al.*, 2006), the importance that women and men attach to work and the professional sphere (Gaunt & Benjamin, 2007), and also the way in which such behaviour is perceived within organisations (Pigeyre & Vernazobres, 2013).

The primary focus here is on the gender stereotypes associated with the “male breadwinner” model. The manner in which these stereotypes are to be measured and represented is a central issue (Davis & Greenstein, 2009), but has received little attention in the existing research. This is because most of the research into the role of gender stereotypes represents them in the form of a one-dimensional scale, ranging from, on the one hand, what is referred to as the “traditional” view of gender, in which the behaviour expected of women and men respectively is highly differentiated, with women being confined to the domestic and family sphere and men to the public and professional sphere, to, on the other hand, an egalitarian view of gender, in which behaviour is not differentiated according to sex (Vespa, 2009). However, a recent article showed that this one-dimensional representation masks the fact that gender stereotypes do not form a homogeneous corpus of beliefs, and that an individual’s adherence to one of these beliefs or representations does not automatically go hand-in-hand with adherence to all the stereotyped representations that make up the ideology underlying the “male breadwinner” model (Grunow *et al.*, 2018). This article therefore seeks first of all to propose a different representation of gender stereotypes, taking a possible multidimensionality into account.

The prevalence of gender stereotypes varies according to a large number of determining factors, which are linked to the individual (Braun & Scott, 2009; Depoilly, 2017), to her or his parents (Donnelly *et al.*, 2016), but also to national cultures and the situation of countries in terms of equality between women and men (Beblo & Görges, 2018). However, to our knowledge, no study has sought to measure the weight of the national level in terms of the variation of adherence to gender stereotypes, or to identify jointly the individual and national factors that determine adherence to gender stereotypes.

This article therefore aims to propose a new representation of gender stereotypes, in the form of several dimensions. It also seeks to identify the individual and national factors that determine

gender stereotypes. To this end, it uses data from the European Values Study, which provides a representative sample of individuals. Proceeding on the basis of a principal component analysis, we show that gender stereotypes linked to the “male breadwinner” model can be broken down into two dimensions, one relating to overall adherence to stereotypes, which is the dominant approach in the literature, and the other relating to the role of the mother. Then, the use of multi-level models allows us, among other things, to establish that the weight of the national level in terms of the variance in adherence to stereotypes is much lower in the second dimension than in the first.

The rest of the article is structured as follows. Section 1 presents the existing literature on the manner in which gender stereotypes and the factors that determine them are measured. Section 2 presents the data and methodology used. Section 3 sets out the main findings, firstly concerning the manner in which gender stereotypes are represented and measured (findings of the principal components analysis), and secondly concerning the factors that determine stereotypes (findings of the multilevel econometric models). Lastly, Section 4 discusses the findings in relation to the existing literature.

1. Review of the Literature

This first section takes stock of what is currently known about gender stereotypes and the factors that determine them.

1.1. Gender Stereotypes: What Does That Mean?

Gender stereotypes pertain to representations and beliefs about the differences between women and men, both in terms of aspirations, behaviour and skills (Lefkoffridi *et al.*, 2019). They are both descriptive (with regard to what women and men are assumed to be) and prescriptive (with regard to what women and men should be) (Heilman, 2012). Individuals internalise them very early on, from childhood onwards, through socialisation and other means (Duru-Bellat, 2008; 2017; Glaude, 2006). Such stereotypes do not concern only the professional sphere: they may relate, for example, to the way in which women and men are assumed to spend their money or time (Champagne *et al.*, 2015), or to the aptitudes that girls and boys, and then women and men, are assumed to have (Cvencek *et al.*, 2011).

This article focuses more specifically on the definition and operationalisation in the research of the gender stereotypes underlying the “male

breadwinner” model, in which a family is assumed to be dependent on the income of the father of the family. This model developed in the middle classes before spreading to the working classes in the mid-20th century (Creighton, 1996), and has long served as justification for pay inequalities (Downs, 2006; Meron & Silvera, 2006). Even though the traditional model of the family with the mother at home and the father as the main income provider has become a minority in most European countries, the idea that the man’s salary is the main income is still widespread (Coron & Schmidt, 2022) and domestic tasks are still distributed very unevenly. This may explain, or be explained by, the persistence of the stereotypes that make up this model (Brousse, 2015; Charles & James, 2005). These stereotypes (referred to in the rest of this text as “gender stereotypes”) generally pertain to the idea that women are better placed and more competent to manage aspects of family and domestic life, and men to manage professional life and careers (Gaunt & Benjamin, 2007; Lee, 2006). They are therefore descriptive and prescriptive stereotypes, which relate to women’s and men’s respective desires (women’s desires are assumed to be oriented towards the domestic sphere, men’s towards the professional sphere); their behaviour (priority given to family or professional life, for example); and their skills (home management and childcare skills on the part of women versus professional skills on the part of men) (Cha & Thébaud, 2009).

Shannon Davis and Theodore Greenstein (2009) have studied the various attempts made in the English-language research to measure these gender stereotypes. Their article emphasises, first of all, that most of these stereotypes are based primarily on a distinction between the sphere of paid work and the domestic sphere (the sphere of unpaid work). More specifically, it identifies several categories of representations that can give rise to gender stereotypes, including, for example, the idea that women have intrinsically different aspirations from men, or that women and men have different skills. However, it also acknowledges the fact that, more often than not, gender stereotypes are ultimately represented and operationalised in the form of a one-dimensional scale, or a continuum, ranging from a traditional view to an egalitarian view, which is in fact widely adopted in the research – in particular the English-language research – into gender stereotypes (Carriero & Todesco, 2018; Gaunt & Benjamin, 2007).

However, the stereotypes underlying the “male breadwinner” model form a corpus that appears

to be more complex, with potential instances of ambivalence (Glick & Fiske, 1997). For example, adherence to a principle of equality in the sharing of childcare does not necessarily always go hand-in-hand with being in favour of income equality. Similarly, the gender-based division of paid work (Giraud & Rémy, 2013) and the gender-based sharing of domestic tasks among heterosexual couples (Champagne *et al.*, 2015; Champeaux & Marchetta, 2022) persist, even within dual-career couples.

Thus, a recent article, which draws on the European Values Study from 2008 and is confined to eight countries, proposed a modelling of gender stereotypes in the form of “classes”, corresponding to different gender stereotype profiles: egalitarian, egalitarian essentialism, intensive parenting, moderate traditional and traditional (Grunow *et al.*, 2018).

Another way of representing gender stereotypes consists in identifying the “dimensions” underlying these stereotypes, each of these dimensions giving rise to a scale on which individuals can be placed. This is what our article seeks to propose, drawing on more recent data (2017) from the same survey (European Values Study).

1.2. Individual and National Factors That Determine Gender Stereotypes

The internalisation of gender stereotypes is influenced by different levels, in particular the individual’s immediate environment (her or his personal characteristics but also those of her or his parents), but also the national context (Dhar *et al.*, 2019).

Studies have shown that women generally have a more egalitarian view of gender than men (Braun & Scott, 2009; Papuchon, 2017). Research has shown a slow but steady decline in the prevalence of gender stereotypes over time, thereby indicating that, in addition to an age effect (younger people agreeing less with a stereotypical view of gender), there may be a generational effect (Braun & Scott, 2009; Donnelly *et al.*, 2016). The level of education also plays a role, with more educated people having on average a less stereotyped view of gender in many countries (Braun & Scott, 2009; Papuchon, 2017), and less acceptance of gender inequalities (Parodi, 2010). These differences manifest themselves according to socio-professional categories, with gender stereotypes and the gender-based division of labour and tasks often being more pronounced in working-class environments (Pasquier, 2021).

Determining factors linked to parents have also been highlighted, and concern both their representations of gender and their behaviour (Halpern & Perry-Jenkins, 2016; Platt & Polavieja, 2016). Dhar *et al.* (2019), for example, have shown that gender stereotypes are passed on from generation to generation within families, which can be linked to the fact that gender stereotypes are disseminated *inter alia* through socialisation, a process in which parents play a key role. This also includes family behaviour – and in particular whether it is has an egalitarian or, on the contrary, traditional dimension (in terms of the division of domestic tasks and paid work between parents, in particular) – which influences adherence to gender stereotypes. In particular, children of working mothers generally have a more egalitarian view than children of stay-at-home mothers (Donnelly *et al.*, 2016). More generally, since adherence to gender stereotypes varies according to socio-economic characteristics, and parents' gender stereotypes are passed on at least in part to their children, parents' socio-economic characteristics can also influence an individual's adherence to gender stereotypes (Davis & Greenstein, 2009).

International comparisons of gender stereotypes have generally shown wide variations between countries (Braun & Scott, 2009). This is because the national level plays an important role: culture and institutions partly shape women's and men's relationship to gender, but also to the personal, family and professional spheres (Beblo & Görges, 2018). Gwenaëlle Perrier and Isabelle Engeli (2015) show, for example, that representations of what constitutes a "good mother" vary greatly from one country to another, depending in particular on childcare policies. Family policies that implement effective childcare systems for young children contribute to reducing stereotypes in which it is assumed that being a good mother is incompatible with engagement in the professional sphere. The situation of countries in terms of gender equality can also contribute to people's representations of gender. In addition to public policies and the situation of countries in terms of equality, it is also important to take the national dimension into account because national cultures disseminate more or less gender stereotypes, and not necessarily all the same stereotypes (Ashwin & Isupova, 2018; Beblo & Görges, 2018).

2. Methodology

This article is essentially based on data from the European Values Study (EVS) from 2017 (Section 2.1), and uses a principal component

analysis to determine the main dimensions of gender stereotypes, and then multilevel econometric models to describe variations in gender stereotypes according to individual and national characteristics (Section 2.2).

2.1. Data Used

The European Values Study has been carried out in European countries on a regular basis since 1981 and provides a large sample of individuals (aged 18 and over). Four countries (Armenia, Azerbaijan, Georgia and Russia) in the sample from the 2017 survey have not been included in our analysis due to their geographical position in relation to Europe's borders. The data is provided with weightings that allow the results to be extrapolated to the population as a whole, at both national and European level (Box 1).

The EVS questionnaire includes several questions relating to gender stereotypes. In particular, individuals are asked to state how strongly they agree with each of the following eight statements:

- "When a mother works for pay, the children suffer."
- "All in all, family life suffers when the woman has a full-time job."
- "A job is alright but what most women really want is a home and children."
- "A man's job is to earn money; a woman's job is to look after the home and family."
- "On the whole, men make better political leaders than women do."
- "On the whole, men make better business executives than women do."
- "A university education is more important for a boy than for a girl."
- "When jobs are scarce, men have more right to a job than women."

These statements represent common gender stereotypes, and are the ones that researchers use most often (sometimes with a slightly different wording) to measure the gender stereotypes underlying the "male breadwinner" model in the form of a one-dimensional scale (Davis & Greenstein, 2009; Grunow *et al.*, 2018). The average degree of adherence to each of these stereotypes in the 30 countries included in the analysis is shown in Tables 1a and 1b.¹

1. Some of these statements relate solely to women (for example, "When a mother works for pay, the children suffer"), others to both women and men (for example, "On the whole, men make better political leaders than women do"). This may limit comparisons of the prevalence of different stereotypes and between different countries. However, it should be pointed out that, in the EVS protocol, all the statements in Table 2a are shown to respondents in a single block (in the form of a "card"), so they can therefore understand all these questions as a block on gender and gender differences.

The statement with which the most people agree is “All in all, family life suffers when the woman has a full-time job” (43.5% of Europeans agree or agree strongly), followed by “A job is alright, but what most women really want is a home

and children” (42.1% agree or agree strongly). Conversely, the statement with which the fewest people agree is “A university education is more important for a boy than for a girl.” (only 8.0% agree or agree strongly), followed by “When

Box 1 – The 2017 European Values Study

The European Values Study is a large-scale European survey of the behaviour, opinions and values of Europeans. It has been carried out approximately every nine years since 1981 among Europeans aged 18 and over living in one of the countries covered by the survey. The most recent wave of the study (EVS 2017) was conducted in 2017–2018.

The questionnaire of the survey is delivered face-to-face and covers a wide range of topics: family, work, politics, morality, beliefs and gender representations.

Each country must provide a sample of at least 1,000 individuals (1,200 for the largest countries). The database is supplied with weightings that enable the data to be processed and representative results to be obtained at national and/or international level. Thus, the database is supplied with calibration weights, which take account of age, gender, region (according to the Nomenclature of Territorial Units for Statistics, NUTS) and level of education, as well as population weights, which aim to extrapolate the calibration weights according to the population of the countries. To analyse differences between countries and draw conclusions at international level, the calibration weights must be multiplied by the population weights.

Table A shows the breakdown of the 49,172 individuals surveyed by country.

Table A – Sample of the European Values Study

Country	Number of individuals
Albania	1,435
Germany	2,170
Austria	1,644
Belarus	1,548
Bosnia and Herzegovina	1,724
Bulgaria	1,558
Croatia	1,487
Denmark	3,362
Spain	1,209
Estonia	1,304
Finland	1,199
France	1,870
Great Britain	1,788
Hungary	1,514
Iceland	1,624
Italy	2,277
Lithuania	1,448
North Macedonia	1,117
Montenegro	1,003
Netherlands	2,404
Norway	1,122
Poland	1,352
Portugal	1,215
Czech Republic	1,811
Romania	1,613
Serbia	1,499
Slovakia	1,432
Slovenia	1,075
Sweden	1,194
Switzerland	3,174

Sources and coverage: EVS 2017. Persons aged 18 and over.

jobs are scarce, men have more right to a job than women.” (15.5% agree or agree strongly, it being borne in mind that this statement has a five-point scale while the other statements have a four-point scale). In other words, the most widespread stereotypes concern the idea that full-time employment is difficult for women to reconcile with family life, and the idea that women intrinsically have different desires from men, with women’s desires being oriented more towards the home and domestic life and less towards the professional sphere. Conversely, the least widespread stereotypes concern the justification of inequalities (in terms of access to education and access to employment), which is in line with the conclusions of previous studies showing that inequalities between women and men are increasingly considered to be unjustified (Parodi, 2010).

In terms of individual determining factors, we have selected the socio-demographic characteristics that the literature has shown to be correlated with adherence to gender stereotypes (cf. Section 1.2), in particular gender, age, level of education and socio-professional category. In the EVS survey, gender is coded into two categories (female/male), and age into six categories (15–24, 25–34, 35–44,

45–54, 55–64, 65 and over). The survey distinguishes between eight levels of education (less than primary, primary, lower secondary, upper secondary, post-secondary non-tertiary, short-cycle tertiary, bachelor level, master level and higher). The socio-professional category (coded by the interviewer on the basis of the respondent’s description of her or his job) is described according to ten categories taken from the European socio-economic classification (large employers, higher managers; lower managers, higher technicians; intermediate; small employers self-employed; agriculture; lower technicians; lower technical; lower sales and service; routine; retired, homemaker not otherwise employed, student, unemployed, disabled, who have never had a job – it being borne in mind that, for the French-language version of this article, we had to interpret the nomenclature used and translate it into French categories; see Table A1-1 in Appendix 1 for correspondence).

We also included certain characteristics of parents. Even though the existing literature has focused mainly on the mother’s employment status (Donnelly *et al.*, 2016), we took into account the father’s level of education, the mother’s level of education, the father’s employment

Table 1a – Average adherence to each gender stereotype

	Disagree strongly (%)	Disagree (%)	Agree (%)	Agree strongly (%)
“When a mother works for pay, the children suffer.”	20.7	43.7	27.4	8.2
“All in all, family life suffers when the woman has a full-time job.”	18.6	37.9	32.4	11.1
“A job is alright but what most women really want is a home and children.”	19.2	38.7	32.1	10.0
“A man’s job is to earn money; a woman’s job is to look after the home and family.”	34.9	39.1	17.9	8.0
“On the whole, men make better political leaders than women do.”	38.5	42.7	14.4	4.4
“On the whole, men make better business executives than women do.”	41.9	42.2	12.9	3.1
“A university education is more important for a boy than for a girl.”	51.6	40.4	6.0	2.0

Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

Table 1b – Average adherence to the stereotype relating to jobs

	Disagree strongly (%)	Disagree (%)	Neither agree nor disagree (%)	Agree (%)	Agree strongly (%)
“When jobs are scarce, men have more right to a job than women.”	35.6	34.7	14.2	10.1	5.4

Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

status and the mother's employment status when the respondent was 14 (employee, self-employed, not employed), and the socio-professional category of the parent who earned the most money when the respondent was 14 (distinguishing between ten categories: prof technical; higher admin; clerical; sales; service; skilled worker; semi-skilled worker; unskilled worker; farm worker; farm manager). For this last variable, it is the respondent who chooses the category from a list proposed by the interviewer, so we used the categories from this list (see Table A1-2 in Appendix 1 for the correspondence between the terms in the English version and in the French version of the questionnaire). We considered that it would be of interest to measure the effect of the father's characteristics. This is because the literature has shown, for example, that male unemployment may partly contribute to a questioning of the "male breadwinner" model and thus of certain associated gender stereotypes (Charles & James, 2005).

We supplemented our analysis by using national variables relating to the situation of different countries in terms of equality between women and men; these variables may have effects on gender representations (Perugini & Vladisavljević, 2019), but also on public policies in that area, the importance of which is highlighted by other works (Hook, 2006; Orloff, 1993).

The "Gender, Institutions and Development Database" produced by the OECD in 2014² was used to retrieve the following information: ratio of time spent by women on domestic work to time spent by men and existence of laws on women's economic rights (2 options, according to the degree of constraint of these laws). We also used the Gender Inequality Index proposed by the UNDP (United Nations Development Programme), which aims to measure gender inequalities in development and progress, and incorporates in particular the maternal mortality rate, adolescent fertility rate, parliamentary representation rate, gender differences in school enrolment and economic activity rates. The data for this source dates from 2015. Lastly, we used variables relating to public policies on parenting, taken from the OECD Family Database, selecting the years for which data was available for the largest number of countries, and proceeding on the assumption that these figures have a certain degree of inertia. We have thus included public spending on childcare systems for children aged 0 to 5 (as a percentage of GDP in 2014), but also, following Hook (2006), the percentage of children aged 0 to 2 enrolled in early childhood

education and care in 2017, the number of weeks of maternity leave in 2014 and the number of weeks of paternity leave in 2014. For non-OECD countries, data was collected manually, from official websites (UNICEF, UNDP, etc.).

2.2. Methodology

First of all, in order to propose a representation of gender stereotypes in the form of several dimensions, we opted for a principal component analysis (PCA), due to the ordered nature of the variables selected. The answers to the eight questions on gender stereotypes were linearised from 1 for "Strongly disagree" to 4 for "Strongly agree" (or 5 for the question with 5 response options), such that a higher number corresponds to greater adherence to the stereotype. The eight numerical variables thus obtained were then centred and reduced.

The PCA made it possible to highlight two orthogonal principal dimensions, linear combinations of the eight initial variables.

For each of the two dimensions, the score for the individual i was calculated as follows:

$$SCORE_i = CoordS1 \times S1_i + CoordS2 \times S2_i + CoordS3 \times S3_i + CoordS4 \times S4_i + CoordS5 \times S5_i + CoordS6 \times S6_i + CoordS7 \times S7_i + CoordS8 \times S8_i$$

where $CoordS1$ represents the coordinate of stereotype 1 in the dimension concerned, and $S1_i$ is the response of individual i for stereotype $S1$. The exact formulae for each dimension are given in Appendix 3.

Then, in order to 1) identify the individual and national factors that determine adherence to each of the dimensions and 2) estimate the importance of the national dimension in adherence variance, we use multilevel random effects models. Multilevel models are suitable for nested data (in this case, the individual level is nested within the national level). They make it possible to take account of the fact that certain phenomena can be explained at different levels (in this case, the individual level and the national level) and to estimate the weight of the higher level in the variations observed (Givord & Guillermin, 2016; Moullet & Salibekyan, 2019) (Box 2).³

2. No such database existed in 2017. We considered that 2014 was a sufficiently recent date for there to be little change between the different data sources.

3. The results of multilevel models with individual and national covariates and random country effects are close to those obtained by estimating regression models in which the country effects are fixed effects.

Box 2 – Multi-level Models

Multilevel models, also known as hierarchical models, are useful when the data is structured in different levels that are nested within one another (in this case, the individuals are grouped into countries). They make it possible to measure the respective importance of the different levels, in this case the individual level and the national level (Boutchenik *et al.*, 2015; Moullet & Salibekyan, 2019). In such cases, non-hierarchical models run the risk of giving biased estimates (Givord & Guillermin, 2016).

The two-level model is modelled as follows:

$$Y_{ij} = \beta_0 + \beta X_{ij} + \gamma X_j + \alpha_j + u_{ij}$$

where β_0 is a constant, Y_{ij} corresponds to the stereotype adherence score for the individual i living in the country j , X_{ij} is a vector of covariates of level 1 (in this case the individual level, e.g. gender, education level, etc.) for individual i of country j , X_j is a vector of covariates of level 2 (in this case the national level, e.g. the national gender inequality index) for country j , and $\alpha_j + u_{ij}$ corresponds to the unobserved terms, broken down into an individual term (u_{ij}) and a term common to all individuals in the same country j (α_j). The variance in the scores obtained can be broken down into two components: an intra-country component (within) and an inter-country component (between). The ratio between the inter-country variance and the total variance then reflects the weight of the national level in the variation in the scores obtained for each of the dimensions. This ratio is referred to as the intra-class correlation coefficient (ICC). In these multilevel models, the “country” effects are therefore random, which makes it possible to estimate the respective coefficients of the national variables (which are absorbed by the fixed effect in models in which the “country” effects are fixed).

3. Findings

3.1. Stereotypes Can Be Broken Down into Two Dimensions

The principal component analysis shows that the gender stereotypes are broken down primarily into two dimensions (in accordance with the elbow rule and the Kaiser rule), which capture 67.7% of the information (52.2% and 15.4% respectively, for eigenvalues of 4.18 and 1.23). Appendix 2 shows the contributions and coordinates of the variables with regard to each of these two dimensions and some additional methodological details.

The first dimension is characterised by a virtually equal weight of each of the eight gender stereotypes: their contributions are all between 11% and 15%, and their coordinates are all positive on the axis. In other words, this first dimension corresponds to a global and virtually undifferentiated adherence to gender stereotypes, which is to say a representation that is fairly close to a linear representation of stereotypes. Thus, this dimension corresponds more or less to the dominant representation in the literature, which contrasts, on the one hand, a traditional vision – in which men must specialise in the professional sphere, in particular because they are more competent there, and women must specialise in the domestic sphere – with, on the other hand, an egalitarian vision. More specifically, however, this dimension attaches a little more importance to stereotypes linked to a form of rational specialisation of women and men in distinct spheres, on the basis of supposedly different skills but also of desires regarded as intrinsically gender-based. For

example, the statement with the highest contribution in dimension 1 (“A man’s job is to earn money; a woman’s job is to look after the home and family”) equates paid work with domestic work – considering in particular that “looking after the home and family” constitutes “work” – but expresses the belief that paid work should remain the preserve of men and unpaid domestic work that of women. This statement pertains directly to the “male breadwinner” ideology (Creighton, 1996).

The two statements with the next lowest contribution (“On the whole, men make better political leaders than women do” and “On the whole, men make better business executives than women do”) relate to skills commonly considered to be important in the professional sphere (political skills and leadership skills) and pertain to a potential gender difference in the possession or exercise of those skills. These statements are reflected in the “think manager – think male” paradigm, whereby the qualities deemed necessary for taking on responsibility are associated with men (Eagly & Karau, 2002).

This first dimension, which we refer to as the specialisation dimension in the rest of the text, therefore focuses on the gender-based specialisation of tasks between the domestic sphere and the professional or public sphere, and pertains to an overall adherence to gender stereotypes on this subject. It therefore corresponds to the dominant representation in the existing literature.

The second dimension consists primarily of the following statements, in the order of their contribution to the dimension: “When a mother works for pay, the children suffer”, and “All in

all, family life suffers when the woman has a full-time job". These two statements correspond to a moralistic vision, in which the exercise of a professional activity is perceived as having negative repercussions on her children or family. These stereotypes therefore pertain, on the one hand, to the suffering that children could potentially experience if their mother works and, on the other hand, to a supposed incompatibility between family life and professional life (Acker, 1990), this applying only to mothers (Wynn, 2017). Furthermore, it should be noted that, in this dimension, stereotypes about differences in professional skills between women and men ("On the whole, men make better political leaders than women do", "On the whole, men make better business executives than women do", "A university education is more important for a boy than for a girl" and "When jobs are scarce, men have more right to a job than women") are projected on the negative side of the axis, while the other stereotypes are projected on the positive side. This axis therefore shows that adherence to gender stereotypes is not necessarily general: it is possible to adhere to certain stereotypes (in this case, relating to the role of the mother), but not to others (in this case, relating to differences in skills).

This second dimension therefore focuses on the role of the mother and will be referred to as such in the remainder of the text: it focuses on the way in which women should perform their role as mothers, and on an apparent incompatibility between playing the role of mother well and engaging in the professional sphere, which pertains to the "intensive motherhood" ideology (Preisner *et al.*, 2020).

3.2. Individual and National Determining Factors Differ According to the Dimension

We will now look into the factors that determine adherence to each of these two dimensions. To that end, we have restricted the sample to individuals for whom the most important individual characteristics (type of occupation, parents' occupation and socio-professional category, in particular) are known, giving a sample of 37,627 individuals, comprising 20,977 women and 16,650 men (i.e. 76.5% of the initial sample).

We build two variables (centred and reduced) corresponding to each of the two dimensions (see Appendix 3). These two dimensions are, by construction, orthogonal. Appendix 3 gives the distributions of the two scores in each of the two dimensions. Table 2 shows the average scores and standard deviations for each of the individual characteristics, and Figures I and II show the average scores per country in these two dimensions.

The results are consistent with the literature (cf. Section 1.2): women, people with higher levels of education, young people and members of skilled socio-professional categories adhere less to gender stereotypes overall (lower scores in the first dimension). As regards the characteristics of parents, people whose mothers worked have a less stereotyped view, as do those whose parents belong to high-income socio-professional categories (prof technical, for example). The differences between countries are the greatest, with average overall adherence to stereotypes ranging from +0.83 for the highest (Lithuania) to -0.96 for the lowest (Norway).

Table 2 – Average score (and standard deviation) in the two dimensions by individual characteristic

	"Specialisation" dimension	"Role of the mother" dimension
All	0.0 (1.0)	0.0 (1.0)
Gender		
Female	-0.13 (0.95)	0.13 (0.97)
Male	0.14 (1.05)	-0.13 (1.02)
Age		
15–24 years	-0.28 (0.96)	-0.18 (0.98)
25–34 years	-0.19 (1.05)	-0.14 (1.03)
35–44 years	-0.21 (0.97)	0.01 (1.01)
45–54 years	-0.13 (1.01)	-0.01 (0.99)
55–64 years	0.09 (0.91)	0.06 (0.95)
65 years and over	0.46 (0.93)	0.17 (1.00)
Level of education		
No formal or less than primary education	0.66 (1.49)	0.15 (1.66)
Primary education	0.42 (1.44)	0.16 (1.41)
Lower secondary ^(a)	0.35 (1.22)	0.18 (1.26)
Upper secondary without higher education	0.14 (0.90)	-0.00 (0.95)
Upper secondary with access to higher education	-0.03 (0.84)	0.02 (0.92)
Post-secondary/advanced vocational education below bacc	-0.32 (0.85)	-0.12 (0.86)
Bachelor's level	-0.52 (0.76)	-0.21 (0.78)
Master's and higher level	-0.47 (0.86)	-0.23 (0.84)



Table 2 – (contd.)

Socio-professional category		
Large employers, higher managers	-0.38 (0.81)	-0.18 (0.83)
Lower managers, higher technicians	-0.35 (0.87)	-0.08 (0.90)
Intermediate	-0.27 (0.92)	0.04 (0.99)
Small employers self-employed	0.25 (1.04)	0.16 (1.05)
Agriculture	0.59 (0.99)	0.16 (1.09)
Lower technicians	-0.03 (0.98)	0.09 (1.08)
Lower technical	0.47 (1.02)	0.01 (1.10)
Lower sales and service	-0.04 (0.96)	0.06 (1.01)
Routine	0.47 (1.05)	0.13 (1.14)
Have never had a job	0.29 (1.12)	0.03 (1.07)
Father's level of education		
No formal or less than primary education	0.22 (1.35)	0.07 (1.37)
Primary education	0.21 (1.13)	0.12 (1.11)
Lower secondary ^(a)	0.16 (0.97)	0.04 (0.98)
Upper secondary without higher education	-0.08 (0.88)	-0.09 (0.89)
Upper secondary with access to higher education	-0.15 (0.83)	0.01 (0.88)
Post-secondary/advanced vocational education below bach	-0.33 (0.84)	-0.15 (0.94)
Bachelor's level	-0.54 (0.78)	-0.23 (0.81)
Master's and higher level	-0.53 (0.89)	-0.24 (0.93)
Mother's level of education		
No formal or less than primary education	0.24 (1.30)	0.08 (1.32)
Primary education	0.19 (1.10)	0.16 (1.10)
Lower secondary ^(a)	0.09 (0.93)	0.02 (0.94)
Upper secondary without higher education	-0.12 (0.93)	-0.06 (0.98)
Upper secondary with access to higher education	-0.19 (0.84)	-0.04 (0.89)
Post-secondary/advanced vocational education below bach	-0.41 (0.91)	-0.42 (0.81)
Bachelor's level	-0.59 (0.69)	-0.26 (0.75)
Master's and higher level	-0.49 (0.93)	-0.25 (0.93)
Father's employment status		
Employee	-0.02 (0.99)	-0.03 (0.99)
Self-employed	-0.02 (1.03)	0.11 (1.01)
Not employed	0.27 (0.96)	-0.05 (0.96)
Mother's employment status		
Employee	-0.13 (0.93)	-0.11 (0.94)
Self-employed	0.01 (1.01)	0.08 (1.00)
Not employed	0.15 (1.08)	0.13 (1.07)
Parents' socio-professional category		
Prof technical	-0.49 (0.85)	-0.22 (0.85)
Higher admin	-0.59 (0.84)	-0.17 (0.88)
Clerical	-0.27 (0.94)	0.00 (1.00)
Sales	-0.23 (0.96)	-0.02 (0.97)
Service	-0.14 (0.93)	-0.05 (0.94)
Skilled worker	-0.05 (0.95)	0.04 (1.02)
Semi-skilled worker	0.11 (1.00)	-0.01 (1.03)
Unskilled worker	0.30 (1.03)	0.10 (1.08)
Farm worker	0.65 (0.92)	0.09 (0.98)
Farm manager	0.29 (0.93)	0.18 (0.95)

^(a) Including vocational training that is not considered as completion of upper secondary education.

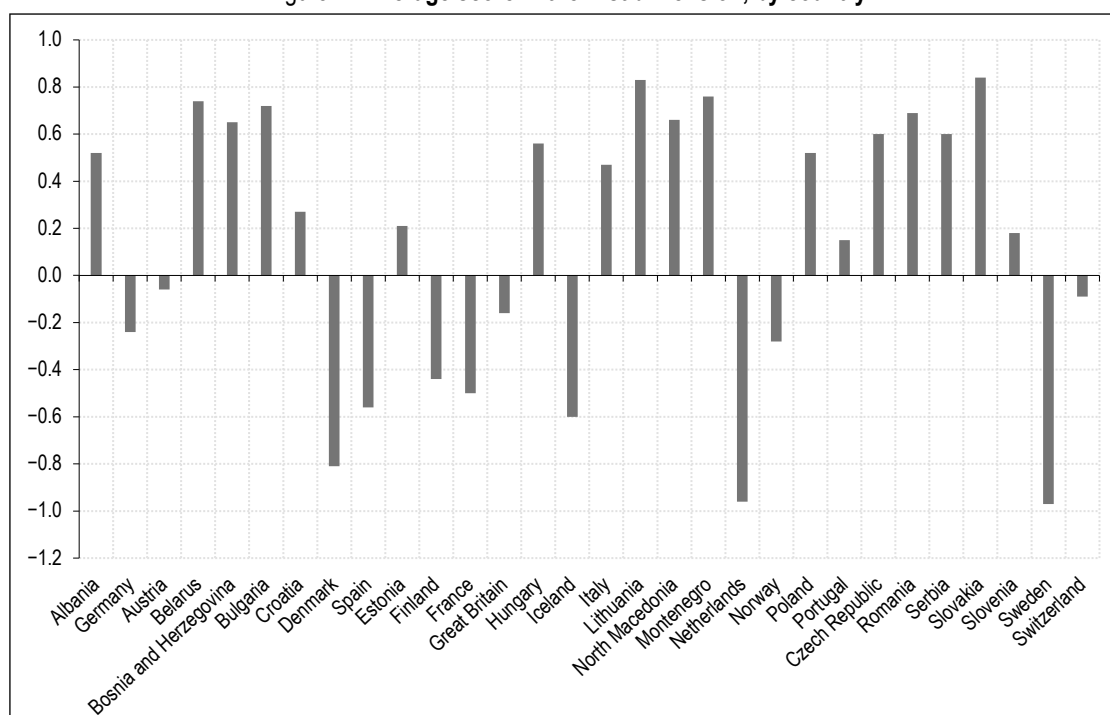
Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

Interpretation of the scores in the second dimension is more complex, since this dimension pertains both to adherence to stereotypes relating to the role of the mother and to non-adherence to stereotypes linked to differences in professional skills. Women have a higher score than men; the score is higher for older people, and lower for people with a higher level of qualifications or whose parents have a higher level of qualifications. People whose mothers worked have a lower score. In this dimension, too, the differences between countries are the greatest, with the lowest average score being - 0.77 (Belarus) and the highest +0.73 (Albania).

In order to investigate these results further, we use multilevel random effects models explaining adherence to stereotypes in dimension 1 ("Specialisation") and dimension 2 ("Role of the mother"), respectively, by way of individual characteristics and the characteristics of the countries of residence.

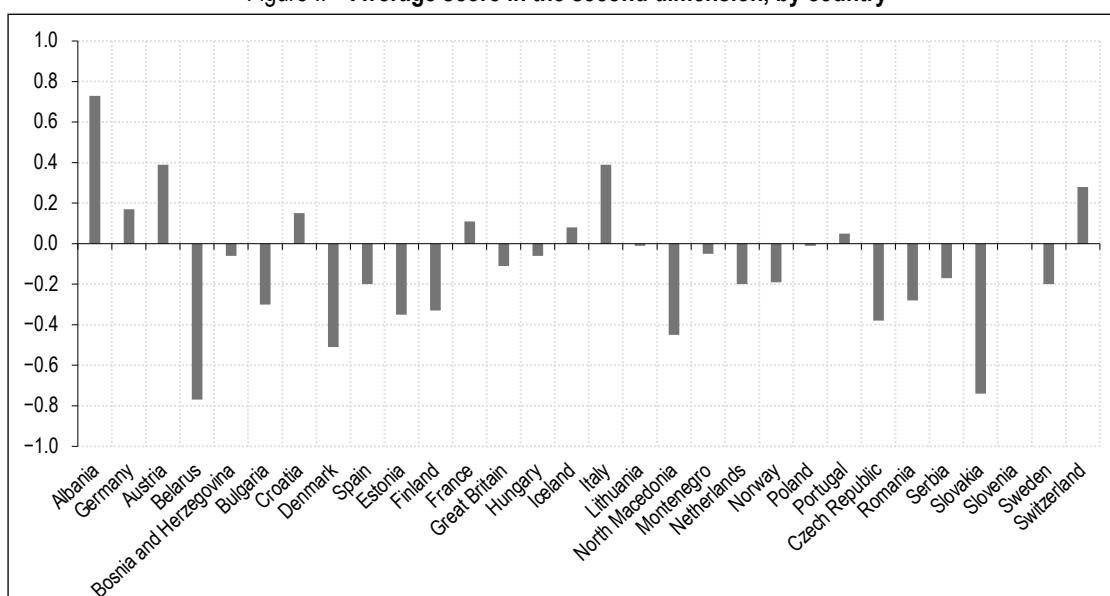
The results are consistent with the literature regarding most of the individual variables for the dimension of overall adherence to stereotypes linked to the "male breadwinner" model (Table 3). In particular, all things being equal, women adhere less to stereotypes overall than

Figure I – Average score in the first dimension, by country



Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

Figure II – Average score in the second dimension, by country



Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

men (Braun & Scott, 2009; Papuchon, 2017). Adherence to stereotypes increases with age, but reaches a plateau of some sort between the ages of 25 and 54, which may correspond to the parenthood situation. Thus, individuals who are parents could revert to a stereotyped vision, a phenomenon that has also been studied in the literature (Vespa, 2009). Qualifications also play a role, with the degree of adherence to stereotypes (dimension 1) decreasing with the level of qualification, as already highlighted by

Papuchon (2017). As regards socio-professional categories, unskilled workers and people who have never had a job adhere to stereotypes the most. In terms of family-related determining factors, having a father with less than an upper secondary education is associated with a more stereotypical view, and having a mother who did not work is associated with a more stereotypical view. Lastly, people whose parents worked in intellectual professions with high qualification levels or in government have a more egalitarian

Table 3 – Results of the models

	Model 1 « Specialisation »	Model 2 « Role of the mother »
Constant	0.37 (0.13)*	0.04 (0.11)
Gender (ref.: Male)		
Female	-0.30 (0.01)***	0.26 (0.01)***
Age (ref.: 65 years and over)		
15–24 years	-0.57 (0.02)***	-0.20 (0.03)***
25–34 years	-0.34 (0.02)***	-0.15 (0.02)***
35–44 years	-0.39 (0.02)***	-0.06 (0.02)**
45–54 years	-0.37 (0.02)***	-0.10 (0.02)***
55–64 years	-0.27 (0.02)***	-0.05 (0.02)**
Level of education (ref.: Upper secondary with access to higher education)		
No formal or less than primary education	0.57 (0.05)***	0.08 (0.05)
Primary education	0.32 (0.02)***	0.09 (0.02)***
Lower secondary ^(a)	0.18 (0.01)***	0.13 (0.02)***
Upper secondary without higher education	0.13 (0.02)***	0.04 (0.02)
Post-secondary/advanced vocational education below bach	-0.05 (0.02)*	0.01 (0.02)
Bachelor's level	-0.16 (0.02)***	-0.09 (0.02)***
Master's and higher level	-0.19 (0.02)***	-0.10 (0.02)***
Socio-professional category (ref.: Lower technical)		
Large employers, higher managers	-0.28 (0.02)***	-0.13 (0.02)***
Lower managers, higher technicians	-0.25 (0.02)***	-0.09 (0.02)***
Intermediate	-0.19 (0.02)***	-0.09 (0.02)**
Small employers self-employed	-0.06 (0.03)*	0.03 (0.03)
Agriculture	0.03 (0.04)	-0.00 (0.05)
Lower technicians	-0.16 (0.02)***	0.03 (0.03)
Lower sales and service	-0.10 (0.02)***	-0.03 (0.02)
Routine	0.10 (0.02)***	0.03 (0.02)
Have never had a job	0.10 (0.02)**	-0.13 (0.03)***
Father's level of education (ref.: Upper secondary with access to higher education)		
No formal or less than primary education	0.10 (0.03)***	-0.00 (0.03)
Primary education	0.09 (0.02)***	-0.09 (0.03)***
Lower secondary ^(a)	0.05 (0.02)**	0.02 (0.02)
Upper secondary without access to higher education	-0.01 (0.02)	-0.01 (0.03)
Post-secondary/advanced vocational education below bach	-0.02 (0.02)	-0.01 (0.03)
Bachelor's level	-0.01 (0.03)	-0.03 (0.03)
Master's and higher level	0.01 (0.02)	-0.04 (0.03)
Mother's level of education (ref.: Upper secondary with access to higher education)		
No formal or less than primary education	0.04 (0.03)	0.09 (0.03)**
Primary education	0.04 (0.02)*	0.13 (0.02)***
Lower secondary ^(a)	0.06 (0.02)**	0.02 (0.02)
Upper secondary without access to higher education	0.07 (0.03)***	0.08 (0.03)**
Post-secondary/advanced vocational education below bach	-0.03 (0.03)	-0.10 (0.03)**
Bachelor's level	0.02 (0.03)	0.02 (0.04)
Master's and higher level	-0.04 (0.03)	0.01 (0.03)
Father's employment status (ref.: Employee)		
Self-employed	-0.00 (0.01)	0.06 (0.02)***
Not employed	-0.07 (0.03)*	-0.05 (0.03)
Mother's employment status (ref.: Employee)		
Self-employed	0.02 (0.02)	0.04 (0.02)
Not employed	0.14 (0.01)***	0.08 (0.01)***
Parents' socio-professional category (ref.: Skilled worker)		
Prof technical	-0.11 (0.02)***	-0.10 (0.03)***
Higher admin	-0.13 (0.02)***	-0.09 (0.03)**
Clerical	-0.04 (0.02)*	-0.00 (0.02)
Sales	-0.03 (0.02)	-0.07 (0.03)*
Service	0.02 (0.02)	-0.06 (0.03)*
Semi-skilled worker	-0.00 (0.02)	-0.06 (0.02)**
Unskilled worker	0.06 (0.02)***	-0.07 (0.02)**
Farm worker	0.14 (0.02)***	-0.10 (0.02)***
Farm manager	0.12 (0.03)***	-0.02 (0.03)

→

Table 3 – (contd.)

Ratio of domestic work	-0.06 (0.05)	0.11 (0.04)**
Laws on women's economic rights (ref.: Rights guaranteed by law)		
Rights partly guaranteed	0.16 (0.17)	-0.24 (0.14)
Gender Inequality Index	0.07 (0.08)	-0.04 (0.07)
Public spending on childcare	-0.10 (0.06)	0.03 (0.05)
Enrolment rate of children in early childhood education and care	-0.18 (0.09)*	-0.04 (0.08)
Duration of maternity leave	0.01 (0.04)	-0.03 (0.03)
Duration of paternity leave	-0.00 (0.07)	0.02 (0.06)
ICC	0.15	0.08
-2 loglikelihood	119,997	130,992
AIC	120,001	130,996

^(a) Including vocational training that is not considered as completion of upper secondary education.

Note: Dependent variables as well as national variables are centred and reduced.

Model 1: A positive coefficient corresponds to a higher score in the dimension, and therefore to a more stereotyped view.

Model 2: A positive coefficient corresponds to a higher score in the dimension, and therefore to a more stereotyped view of the role of the mother or a less stereotyped view of the differences in skills between women and men.

Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1). *** : p-value<0.001; ** : p-value<0.01; * : p-value<0.05.

view than those whose parents worked in agriculture or had unskilled jobs, who have a more traditional and stereotyped view. As far as national variables are concerned, a higher rate of enrolment of children in early childhood education and care corresponds to less adherence to stereotypes. This underlines the fact that childcare systems are closely linked to the prevalence of certain stereotypes (Perrier & Engeli, 2015).

As regards the dimension of both adherence to stereotypes relating to the role of the mother and non-adherence to stereotypes relating to differences in skills between women and men (dimension 2), women in fact score higher. This may have as much to do with greater adherence to stereotypes relating to the role of the mother as with less adherence to stereotypes relating to skills. The score in this dimension generally increases with age, which may be linked to the strong influence of the intensive motherhood ideology among older people (Cotter *et al.*, 2011), but tends to decrease with educational level. Executives, managers and intermediate professions have the lowest scores. There are no significant differences according to the father's level of education, with the exception of the primary level, which is associated with lower adherence, but the scores are higher for people whose mothers have a low level of education and for those whose mothers did not work, which may be explained by the fact that the children of

mothers who did not work have internalised the idea that a mother's priority should be to look after her children, whatever her professional skills. This highlights how important women's work is in the spreading of a more egalitarian vision (Donnelly *et al.*, 2016). Lastly, as regards the differences between countries, no variables are significant.⁴

To assess the extent of national differences in adherence to gender stereotypes, we compare the intraclass correlation coefficients (ICC) of several models (Table 4): the ICC of a multi-level model without any covariates, the ICC of a model with only individual covariates, and the ICC of a model with both individual and national covariates (the one in Table 3).

First of all, 27% of the variance in adherence to stereotypes in relation to specialisation is attributable to differences between countries, compared with 10% of the variance in adherence to stereotypes in relation to the role of the mother. The addition of individual covariates does not reduce the ICCs (29% and 9% respectively): the national differences are therefore not explained by differences in the individual characteristics of the national populations. If national covariates are added to the individual covariates, the ICC

4. It should be noted that the variables "Public spending on childcare" and "Rate of enrolment in early childhood education and care" are positively correlated (0.50 on a country basis, 0.56 on an individual basis).

Table 4 – ICC of different models

	Models with no covariates (%)	Models with individual covariates (%)	Models with individual and national covariates (%)
Dimension 1 (Specialisation)	27	29	15
Dimension 2 (Role of the mother)	10	9	8

becomes much lower, at 15% (dimension 1) and 8% (dimension 2). This drop could be due to the simple fact that a large number of national variables have been added (7), it being borne in mind that there are relatively few countries (30). To verify that this is not the only mechanism at work, we calculated the ICC of the models including the individual covariates and only one national variable (the significant variable: the enrolment rate in early childhood education and care). The ICCs are then 14% and 10% respectively, which shows that, in dimension 1 at least, it is indeed the addition of this variable (and not the simple fact of adding numerous national variables) that lowers the ICC.

4. Discussion

This study has therefore shown that the gender stereotypes underlying the “male breadwinner” model could be represented by two dimensions, one relating to overall adherence to these stereotypes, with the idea of specialisation based on skills and desires regarded as intrinsically gender-based, and the other relating to the role of the mother and its incompatibility with the exercise of a professional activity (combined with non-adherence to stereotypes relating to differences in skills between women and men). It has then shown that the factors that determine adherence (or non-adherence) to these two dimensions differ in part. In particular, the weight of the national level in the variance of adherence is lower for dimension 2 relating to the role of the mother. Moreover, variations according to gender and parental characteristics also differ. This discussion pertains to these four points.

As we have already mentioned, the gender stereotypes underlying the “male breadwinner” model are most often represented and operationalised in the form of a one-dimensional scale, ranging from a traditional vision to an egalitarian vision (Davis & Greenstein, 2009; Gaunt & Benjamin, 2007). However, in the light of our results, this representation may seem reductive, and may lack some of the complexity of this phenomenon (Grunow *et al.*, 2018). Some studies opt for a multidimensional analysis, defining these dimensions *ex ante*, for example “opinions on the abilities and skills of women and men”, “opinions on the gender-based division of labour” (Donnelly *et al.*, 2016; Papuchon, 2017). However, these distinctions are made *ex ante*, and are not based on a direct analysis of the data in order to identify them. In this respect, our study shows that gender stereotypes can empirically be broken

down into two dimensions (overall adherence on the one hand, and a focus on the role of the mother versus stereotypes relating to skills on the other). An interesting point in relation to this second dimension is that it corresponds both to adherence to stereotypes relating to the role of the mother and to non-adherence to stereotypes relating to differences in professional skills.

The other central results of this study concern the factors that determine the level of adherence to stereotypes in these two dimensions. Whereas the existing literature has focused either on individual determining factors (Papuchon, 2017) or in national factors that determine gender stereotype adherence (Grunow *et al.*, 2018), one of the contributions of this study is to examine these two levels jointly. We also show that the determining factors are not exactly the same for the two dimensions. Thus, the weight of the national level in the variance of adherence is much greater for the first dimension than for the second (27% compared with 10%). At the same time, only the variable relating to the rate of enrolment in early childhood education and care is significant in dimension 1 (“Specialisation”), with higher enrolment rate unsurprisingly corresponding to less adherence to stereotypes. This would appear to suggest that other, unobserved national characteristics, such as culture for example, play a role in overall adherence to gender stereotypes and more particularly in adherence to a stereotyped vision in relation to gender-based specialisation between the domestic and professional spheres. This therefore calls for closer investigation of the institutions and policies that can enable national cultures to evolve, and therefore, for example, of the role of an institution such as the school (Duru-Bellat, 2008). Moreover, the fact that the national level has a lower weight in the variance of dimension 2 (“Role of the mother”) than in that of dimension 1 (“Specialisation”) puts into perspective the work that emphasises the variability of the role of the mother according to national cultures (Perrier & Engeli, 2015). Our results show that differences between countries in terms of adherence to stereotypes relating to the role of the mother are explained more by differences in (potentially unobservable) individual characteristics than by differences linked to culture or national institutions. This could call into question the importance, highlighted in other works (Lin, 2018), of national institutions and policies in gender stereotypes.

As regards the differences between women and men, while women have a more egalitarian view

than men in terms of overall adherence to stereotypes (first dimension), their score is higher than that of men in the second dimension, which may reflect both greater adherence to gender stereotypes relating to the role of the mother and less adherence to stereotypes relating to gender-based differences in professional skills. To test this, we measured adherence to each stereotype separately, for women and men. We have found that, when it comes to stereotypes relating to the role of the mother, the averages for women are very close to the averages for men, whereas, when it comes to stereotypes relating to gender-based differences in professional skills, the averages for women are much lower than the averages for men. This would appear to indicate that women still subscribe to the intensive motherhood ideology and the image of a mother totally devoted to her children, to the point of not being able to devote themselves to a professional activity, even though they call the idea that women are less competent than men in the professional sphere into question more than men do. This result links back to previous studies on the weight of the of intensive motherhood ideology for women (Cotter *et al.*, 2011). It also stresses the importance of taking gender differences into account when implementing policies and practices aimed at reducing gender stereotypes.

Differences according to parental characteristics also vary between the two dimensions. In particular, the father's level of education seems to play a greater role in the first dimension, and the mother's in the second. This can be explained by the fact that the second dimension concerns the role of the mother, and we can therefore assume that the role of the mother is more important overall in an individual's adherence to a traditional or, on the contrary, egalitarian view on this subject. Differences according to the mother's employment status and to the father's employment status are significant in both dimensions. These results enrich the literature on the parental factors that determine adherence to gender stereotypes, which generally considers the latter to be a one-dimensional corpus and therefore stops at what corresponds to our first dimension (Davis & Greenstein, 2009; Dhar *et al.*, 2019; Platt & Polavieja, 2016).

* *
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Lastly, these results prompt discussion on the basis of the two central theories on adherence to gender stereotypes, the “interest-based” theory (pertaining to the idea that individuals adhere or do not adhere to stereotypes according to their own interests), and the “exposure-based” theory (pertaining to the idea that individuals adhere or do not adhere to stereotypes according to their degree of exposure to egalitarian configurations) (Davis & Greenstein, 2009). In this respect, our results show that these two theories are complementary: for example, women adhere less to stereotypes overall (interest-based), as do individuals whose mothers worked (exposure-based).

Despite its contributions, this study has a number of limitations that give reason to open up new avenues of research. First of all, it is primarily the gender stereotypes underlying the “male breadwinner” model that have been studied, although gender stereotypes also relate to other subjects (for example, the supposed inferiority of women in the field of mathematics). It would therefore be of interest to extend this study, and in particular the multidimensional representation, to a more general corpus of stereotypes. Secondly, the individual factors that determine gender stereotypes that we have taken into account are limited by the information available in the EVS survey used. It might have been of interest to take other determining factors into account, such as the type of education received. In the same way, other national characteristics could be taken into account, for example those describing the social context. In addition, we studied stereotypes as declared by individuals. However, the literature has shown that there are cases where individuals subconsciously adhere to stereotypes while declaring completely egalitarian beliefs (Kahneman, 2015; Madsen & Andrade, 2018); it would also be of interest to investigate this. Lastly, as regards national characteristics, it is impossible to establish the direction of causality: gender stereotypes can undoubtedly also contribute to a country's situation in terms of equality between women and men. Establishing this causality would require longitudinal data, for example. □

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APPENDIX 1

Table A1-1 – English-French correspondence for respondent's socio-professional category

Terminology in EVS database (« European Socio-economic Classification »)	Translation into French categories
Large employers, higher managers	Cadres de direction
Lower managers, higher technicians	Managers intermédiaires
Intermediate	Professions intermédiaires
Small employers self-employed	Indépendants / Chefs de petites entreprises
Agriculture	Agriculteurs
Lower technicians	Contremaîtres
Lower technical	Ouvriers qualifiés
Lower sales and service	Employés
Routine	Ouvriers non qualifiés
Retired, Homemaker not otherwise employed, Student, Unemployed, Disabled, who have never had a job	N'a jamais eu d'emploi

Table A1-2 – English-French correspondence of parents' socio-professional category

Terminology in EVS database and in the English version of the EVS questionnaire	Terminology in the French version of the EVS questionnaire
Prof technical	Professions intellectuelles supérieures
Higher admin	Métiers de direction
Clerical	Employés de bureau
Sales	Métiers de la vente
Service	Métiers des services
Skilled worker	Contremaîtres et ouvriers qualifiés
Semi-skilled worker	Ouvriers semi-qualifiés
Unskilled worker	Ouvriers non qualifiés
Farm worker	Ouvriers agricoles
Farm manager	Agriculteurs exploitants

METHODOLOGICAL DETAILS ON THE PCA

The analysis led us to select the first two axes, either by applying the Kaiser rule (the first two axes are the only ones with eigenvalues greater than 1) or by applying the elbow rule, as set out in the following graphic showing the explained inertia proportions.

Table A2-1 – Eigenvalues

No.	Eigenvalue	Difference	Percentage	Cumulative percentage	
1	4.1787	.	52.23	52.23	*****
2	1.2345	2.9442	15.43	67.67	*****
3	0.6030	0.6315	7.54	75.20	*****
4	0.5256	0.0774	6.57	81.77	*****
5	0.4497	0.0759	5.62	87.40	*****
6	0.3892	0.0605	4.87	92.26	*****
7	0.3288	0.0604	4.11	96.37	*****
8	0.2903	0.0385	3.63	100.00	*****

Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

Table A2-2 – Contributions and coordinates of variables on axes 1 and 2

Variable	Contribution axe 1	Coordinate axe 1	Contribution axe 2	Coordinate axe 2
S1	11.1	0.68	21.0	0.51
S2	12.2	0.71	9.3	0.34
S3	11.6	0.70	22.8	0.53
S4	15.5	0.80	0.9	0.10
S5	13.4	0.75	13.9	-0.41
S6	12.9	0.73	18.2	-0.47
S7	12.1	0.71	12.1	-0.39
S8	11.3	0.69	2.0	-0.16

Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

S1: "When a mother works for pay, the children suffer."

S2: "A job is alright but what most women really want is a home and children."

S3: "All in all, family life suffers when the woman has a full-time job."

S4: "A man's job is to earn money; a woman's job is to look after the home and family."

S5: "On the whole, men make better political leaders than women do."

S6: "On the whole, men make better business executives than women do."

S7: "A university education is more important for a boy than for a girl."

S8: "When jobs are scarce, men have more right to a job than women."

FORMULAE USED TO CALCULATE THE SCORES FROM THE TWO PCA DIMENSIONS

The formulae below were used to calculate the individual scores from the two PCA dimensions. The numerical parameters correspond to the coordinates of the variables on the axes.

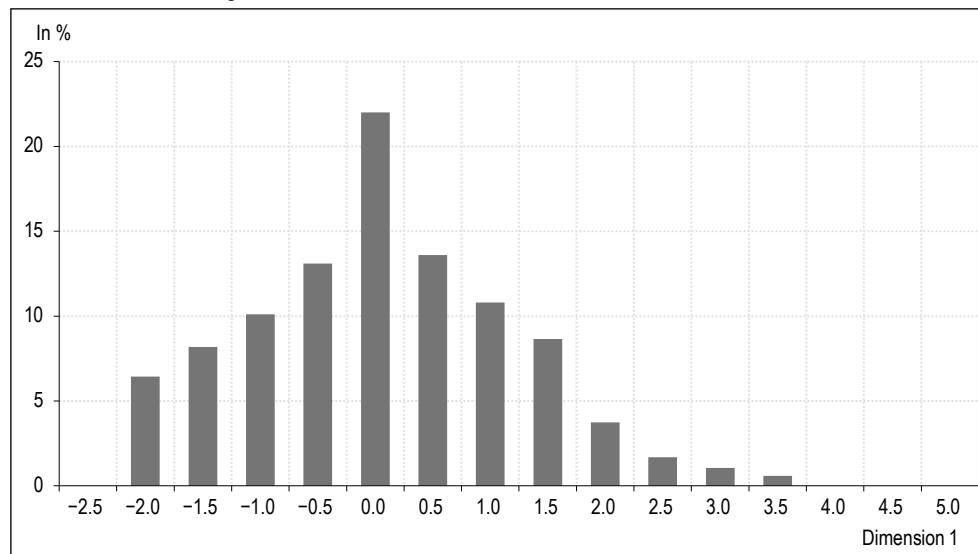
$$DIM1_i = 0.68 \times S1_i + 0.71 \times S2_i + 0.70 \times S3_i + 0.80 \times S4_i + 0.75 \times S5_i + 0.73 \times S6_i + 0.71 \times S7_i + 0.69 \times S8_i$$

$$DIM2_i = 0.51 \times S1_i + 0.34 \times S2_i + 0.53 \times S3_i + 0.1 \times S4_i - 0.41 \times S5_i - 0.47 \times S6_i - 0.39 \times S7_i - 0.16 \times S8_i$$

where $DIM1_i$ represents the way in which the score of the individual i is calculated in dimension 1 ("Specialisation"), and $S1_i$ corresponds to the response of the individual i in the first stereotype (see above for the list of different stereotypes).

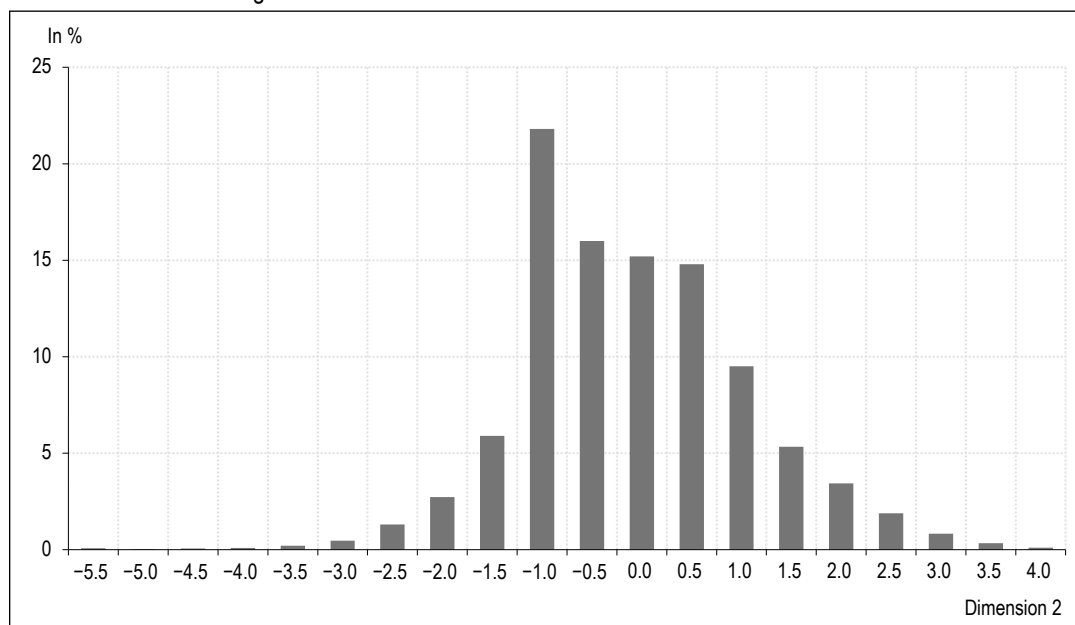
The two dimensions were then centred and reduced.

Figure A3-I – Distribution of scores in the first dimension



Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

Figure A3-II – Distribution of scores in the second dimension



Sources and coverage: EVS 2017. People aged 18 and over who are resident in one of the 30 European countries selected for the analysis (cf. Box 1).

