Gender Gaps in Care Work: Evidences from Argentina, Chile, Spain, and Uruguay

Domínguez-Amorós, Màrius; Batthyány, Karina; Scavino, Sol

Màrius Domínguez-Amorós

Universitat de Barcelona. Departament de Sociologia, Spain

Department of Sociology, Universidad de Barcelona, Avda. Diagonal, 696, 08034, Spain.

e-mail: mariusdominguez@ub.edu

ORCID: https://orcid.org/0000-0003-2225-4987

Karina Batthyány

Departamento de Sociología de la Facultad de Ciencias Sociales (UDELAR), Uruguay.

ORCID: https://orcid.org/0000-0001-6836-9806.

karina.batthyany@cienciassociales.edu.uy

Sol Scavino

Departamento de Sociología de la Facultad de Ciencias Sociales (UDELAR), Uruguay.

ORCID: https://orcid.org/0000-0002-6675-7765.

sol.scavino@cienciassociales.edu.uy

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Abstract

This paper is a comparative analysis of the gender gaps in the non-paid domestic and care work (NPDCW) undertaken in homes in Argentina, Chile, Spain, and Uruguay. The explanatory factors of this gap in two-income households and their magnitude and impact on the distribution of NPDCW are analyzed using data from national time use surveys. The weakness of micro-sociological approaches and the variables related to relative resources and time availability is demonstrated using the estimation of a regression model, while the importance of approximations of gender roles and analyses that incorporate macro-sociological factors is shown. Furthermore, the findings show that NPDCW is done by women in 70% of cases with women's incomes and time availability among the individual variables that drive change within the couple. The results show that the equalizing effects of time availability and gender ideology are stronger for women in more egalitarian countries; women in less egalitarian countries benefit less from their individual-level assets. Additional comparative analysis shows that other macro-level factors (economic development, female labor-force participation, gender norms, and welfare systems) may also influence the division of this work. The results suggest that changes in individual-level factors alone may not be enough to achieve an equal division of labor in the household without a parallel reduction in macro-level gender inequality.

Keywords Care Work, Gender, Cross-national, Time Use, Housework, Division of Labor

1 Introduction

The division of labor in the household has evolved in the last decades towards a greater equality. Research has documented that after controlling for partners' time availability, gender role ideology, relative resources, and institutional and contextual cultural differences, the higher burden persists for females (Hagqvist et al., 2017).

Time use surveys have been invaluable measuring tools in visualizing the magnitude of NPDCW and the characteristics of the population who do it, demonstrating the sexual division of work and women's work overload (Aguirre & Ferrari, 2014; Arriagada, 2007; XXX, 2011; Ferrant et al., 2014; Francavilla et al., 2013).

The time use studies developed in Latin America provide comprehensive information on time use in the countries in the region, enabling us to advance towards making international comparisons mainly in cross-sectional type surveys (Aguirre & Ferrari, 2014; Budlender, 2010; Cepal, 2017; Durán & Milosajevic, 2012; Espejo et al., 2010; Rodríguez, 2015).

Nonetheless, few comparisons have been made between countries in Europe and countries in other continents that add to the understanding of how cultural differences, diverging welfare states, and social development impact on basically egalitarian societies in the distribution of NPDCW between men and women. Some of the emerging studies are Amarante & Rossel (2017), Bose (2015) Budlender (2010), Antonopoulos (2008), and ZZZ (2018). Comparative studies on time use are not only more frequent in Spain than in Latin America but they also started earlier (Francavilla et al., 2013; Moreno, 2015; Sevilla-Sanz et al., 2010). The upsurge in the use of time use surveys and the pre-eminence of the countable approach has allowed the time allocated to different activities (in this case, domestic work and care). to be quantified, relegating in importance the dimensions relating to perceptions, norms and values of gender relations.

This is even more the case in comparative analysis that include countries such as the ones focused on in this paper, where androcentric values, societal norms and cultures tend to persist more, along with the assignment of work to females and males according to gender relations (XXX, 2014). Furthermore, in countries where public support for childcare is low, entitlements depend on the individual's position in the labor market and family policies follow conservative values with men as breadwinners and women as homemakers (Hagqvist et al., 2017).

The aim of this paper is to present a comparative analysis of the explanatory factors of the gender gap in the distribution of NPDCW in homes. In a context where the more traditional role of a single provider (*male breadwinner/housewife household*) is being replaced by the two-income model (Dema, 2006), the interest lies is analyzing how strategies have been modified in relation to the contributions made in terms of time and work by the men and women that form households. The present paper also contributes to the literature of comparative studies, addressing societies that have been identified as familistic such as Argentina, Chile, Uruguay, and Spain.

2 Background

2.1 Macro-sociological elements

The research outcomes of comparative studies impact on the relevance of macro-sociological factors in understanding the division of NPDCW in households. More specifically, this type of study analyses the macro-sociological elements that modify the direction and magnitude of the effects of individual characteristics, their (re-)shaping effect in terms of the sexual division of domestic work, and the impact that social policies may have (Amarante & Rossel, 2017; Arriagada, 2007; Blofield & Martínez, 2014; Fuwa, 2004; Lachance-Grzela & Bouchard, 2010; Lewis, 2010; Yu & Xie, 2014).

Regarding the levels of gender equality, economic development and social and demographic structure, composite indicators are required because gender equality is a complex and multi-dimensional concept. Consequently outcome-focused gender-related indices have been proposed to measure the extent of gender disparities in well-being outcomes like education, health, and economic and political participation at a cross-national level (Fontanella et al. 2019). A critical review of these indices can be found in Klasen (2007) and Bericat (2011).

Among the different available indexes, the Global Gender Gap Index (Table 1), examines the gap between men and women across four fundamental subindexes: Economic Participation and Opportunity, Educational Attainment, Health and Survival, and Political Empowerment (World Economic Forum, 2020).

TABLE 1. THE WORLD ECONOMIC FORUM'S GENDER GAP INDEX AND SUBINDEXES BY DIMENSIONS. COUNTRIES' SCORES, 2020.

	Argentina	Chile	Spain	Uruguay
Overall gender gap score	0.74	0.72	0.79	0.73
Indexes by dimensions				
Economic participation and opportunity	0.62	0.60	0.68	0.69
Educational attainment	0.99	1.00	0.99	1.00
Health and survival	0.98	0.97	0.97	0.98
Political Empowerment	0.38	0.30	0.52	0.27

The maximum value in the indices is 1 (parity) and the minimum 0 (disparity).
Source: World Economic Forum (2020).

The results show that apart from political empowerment, there are few differences in the indexes across countries. Spain (79.5, 8th overall) has jumped 21 places since the previous edition, largely due to the 2018 nomination of the world's most female-centric government, with 65% of women ministers.

In terms of social and demographic structure, in all the countries there is a sustained decrease in the population growth rate and a trend towards ageing, with a greater incidence and temporal scope in Spain. The percentage of the population over 65 years old in Spain in 2018 was 19.4%, and in Argentina, Chile, and Uruguay it was 11.1%, 11.5%, 14.8%, respectively. Regarding the birth rate, Spanish couples have an

average of 1.33 offspring, whereas for Chile, Argentina, and Uruguay, the figures are 1.94, 2.29, and 1.98, respectively. Together with the increasingly older mean age of mothers at first birth (32 years old in Spain and 28 in Argentina, Chile, and Uruguay) and the rising number of single-person households, these data are an indication of the shift in these countries' care needs, creating some needs that have not yet been addressed in protection schemes and national policies, especially in the Latin American countries.

Indicators of educational achievement and female labor force participation (Global Gender Gap Report, 2020) demonstrate that women generally access the highest levels of education, with increased equality across the three countries. However, while female labor force participation is higher in Spain, a closer examination of other aspects that impact on this participation reveals labor market inequality in all the countries analyzed.

Argentina, Chile, Uruguay, and Spain are countries that share some population commonalities and they all have welfare states, albeit in different forms. For example, Spain has pioneered the inclusion of gender issues in its political agenda, two examples of which are the creation of care laws and the legalization of abortion. In Latin America, similar progress has been made in Uruguay, where the National Women's Institute was created in 2005 to regulate, monitor and ensure the cross-cutting nature of gender policies. Moreover, since 2012 different laws have been passed such as those governing abortion, the gender quota as a mechanism for women to access political power, the regulation of human assisted reproduction techniques, egalitarian marriage, and the 2015 Care Law.

Although Chile and Argentina have advanced in some aspects such as the recognition of egalitarian marriage (2015 and 2010, respectively), legislation on violence against women (in place in all four countries), and laws that set political participation quotas, other issues such as abortion are the focus of heated social debate battled out in the parliaments. Notably, all four countries report high levels of familism as the normative model underlying the collective social imaginary and prevalent in institutional practice, albeit to differing degrees, in addition to poorly developed public service networks, scanty public care and job market access support, and a low proportion of men in domestic and care work (also called the Mediterranean system) (Kan et al., 2011).

Regarding social values, the World Values Survey (Institute for Comparative Survey Research) provides a general picture of the countries under study. Table 2 presents the key questions indicating gender norms asked in the sixth wave of the WVS in the countries analyzed (the methodological and technical aspects can be consulted at www.worldvaluessurvey.org).

TABLE 2. OPINIONS ON ASPECTS RELATING TO THE IDEOLOGY OF GENDER, BY COUNTRY. WORLD VALUES SURVEY (PERCENTAGE OF ANSWERS EXPRESSING AGREEMENT WITH THE STATEMENT OR NEUTRALITY).

	Argentina	Chile	Spain	Uruguay
When there is little employment, men must have more right to a job	29.5	41.9	17.5	32.5
If a woman earns more than her husband, this will almost certainly create problems	46.0	66.2	25.0	38.6
When a mother does paid work her children suffer	-	37.8	28.5	37.4
In general, men are better political leaders than women	27.5	28.2	11.5	9.1
A university education is more important for a boy than for a girl	16.6	20.9	11.7	9.7
Being a housewife is almost as satisfying as having a paying job	54.2	44.4	49.5	59.7

Source: author's own elaboration based on the sixth wave of the World Values Survey. Argentina, 2013; Chile, 2012, Spain, 2011 and Uruguay, 2011. Inglehart et al. (eds.) (2014).

The results show that there are more gender equitable representations in Spain, particularly in relation to women's financial independence and their link with the job market. Contrarily, Chile has the most traditional representations, penalising women's participation in the labour market and confining them to the domestic sphere. The positions of Uruguay and Argentina are more intermediate.

2.2 Micro-sociological factors to explain the domestic and care work gaps

Three main theoretical approaches can be considered to address the issue of the NPDCW gaps among two-income couples. The first refers to time availability which, based on Becker's human capital and family theories, understands the division of NPDCW as a rational allocation resulting from the other demands placed on people. Hence, the members of the household contribute to the different activities depending on their specialist skills, productivity, and perceived benefits, and the more time spent doing paid work, the less time spent doing NPDCW (González-López, 2001; Davis et al., 2007; Domínguez-Folgueras, 2012).

The second approach, known as the relative resources perspective or the economic exchange theory, understands the process of the division of labor as a form of negotiation between the members of the couple where income, education, and job prestige are resources in their negotiating power. In this approach, people attempt to minimize the time they spend on NPDCW using any advantage they have in terms of resources to best negotiate their absence from it. Empirical studies that use each member of the couple's income as an explanatory factor of the distribution of work often confirm this assumption. However, when the empirical results of the effect of educational level and job prestige are taken into consideration, the findings

are not as conclusive and show a high level of diversity and inconsistency across contexts (Fuwa, 2004; Knudsen & Waerness, 2008; Lachance-Grzela & Bouchard, 2010; Domínguez-Folgueras et al., 2016).

The third approach is based on gender relations. From this perspective, men and women are socialized to adapt to different socially constructed roles. To this effect, gender is a behavior conditioned by expectations and social rules that some people assume given the behavior of others (Davis et al., 2007; Killewald & Gough, 2010; Thébaud, 2010). Although earlier generations of sociological gender theorists saw gender norms as deeply internalized, the more recent view emphasizes "gender display," sometimes called "doing gender". Different studies show a positive relationship between egalitarian attitudes and gender roles within the couple relationship and a more equal division of NPDCW (Knudsen & Waerness, 2008; Sevilla-Sanz et al., 2010).

Sociologists of gender focus on the stubborn persistence of cultural norms that make men and women accountable for different activities and on the institutions built up around these understandings. Some of the findings also show that women's employment situation and their relative resources do not sufficiently explain the division of NPDCW by gender, pointing to the explanatory value of socialization and gender roles (XXX, 2011; Moreno, 2015), norms rooted in Spanish and Latin American societies that are of major interest in this study (Sevilla et al., 2010; Campaña et al., 2017).

Walter (2018) points to several quantitative studies that have examined the change in these attitudes since the end of the 1970s, demonstrating that traditional gender role attitudes have declined.

3 Data and Methods

The specific aim of this empirical section is to analyze the explanatory factors of the gender gap in the distribution of NPDCW among two-income heterosexual couples in Argentina, Chile, Spain, and Uruguay. In the following section, the discussed elements are tested empirically with the emphasis of illustrating the previously mentioned advantages and disadvantages.

The discussion presented leads to the following three hypotheses:

Hypothesis 1: Women's relative resources play an important role in explaining the proportion of NPDCW that is carried out: working full time, having a high educational level, a high prestige occupation and providing more economic resources than the other member of the couple will reduce the proportion of work done by women.

Hypothesis 2: The variables of men's relative resources will have a lesser, if not nonexistent, effect which will allow us to verify the relevance of gender construction to explain the distribution of NPDCW.

Hypothesis 3: There will be a greater gender gap in countries where attitudes to assigning jobs according to gender relations persist, and the independent variables will have different effects and have different magnitudes due to the relevance of the visualization of gender roles.

3.1 Data

The explanatory factors of this gap and their impact on the distribution of NPDCW are analyzed using data from national time-use surveys. In Spain, the latest available data were collected in the 2010 Time Use Survey conducted by the National Statistics Institute (INE, Spain 2010) following the European harmonized surveys guidelines. In the case of Argentina, for the first time in 2013 the National Institute of Statistics and Census (INDEC) introduced a module with national urban coverage, the Non-Remunerated Work and Time Use Module, which was included in the Annual Urban Household Survey (INDEC, Argentina, 2013). In 2013 and 2015, the first Time Use Survey carried out by the National Statistics Institute (INE-Chile, 2015; INE-Uruguay, 2013) was applied in Uruguay and Chilean, respectively. Regarding the instruments for collecting information, it should be noted that they are examples of the two existing methodological alternatives. In the Spanish survey, the instrument is basically an activity diary (based on a harmonized list of Eurostat's proposal in its 2008 guidelines), which records what people do during the 24 hours there are in a day (weekdays plus a Saturday or holiday) in fractions of 10 minutes. The classification of activities is divided into 10 groups (International Classification of Activities for Time-Use Statistics-ICATUS: personal care, paid work, studies, domestic and care work, voluntary work, social life and entertainment, sports and outdoor activities, hobbies, media, journeys and unspecified time.

In the Chilean and Uruguayan surveys, the information is collected from a list of activities (a structured questionnaire based on a selection of activities of interest) where it is collected if the activity was done and the time allocated (usually yesterday). The surveys are based on a list of activities, which are pre-defined in the Classification of Time-Use Activities for Latin America and the Caribbean (CAUTAL), which takes the ICATUS as a reference.

In the case of Argentina, it consists of a module added to a regular survey, which includes questions about paid work, so it has the limitation of including a list of restricted NPDCW activities: household tasks, care activities for children, sick or elderly members of the household, and activities dedicated to school support

and / or the learning of household members. It must be pointed out that in the Argentine survey at least one hour must be spent on the activity for it to be considered, thus eliminating people, and mainly men, who spent less time on the activity.

Last, it must be noted that the surveys obtained these nationally representative samples of households and individuals using clustered and stratified sampling designs.

The diversity of methodological procedures and possible discrepancies in the results have been studied extensively in various works (XXX, 2014; Schulz, & Grunow, 2011). Of interest here is the fact that studies have indicated that direct questions about the distribution of domestic time and unpaid care produce similar results regardless of the form of measurement. Furthermore, to ensure the comparability of the information collecting instruments, total NPDCW time allocated to household tasks was not analyzed (since this can depend on both the type of questionnaire and contextual and cultural factors), but rather the distribution of the total NPDCW time allocated by men and women (see the measures section). Heterosexual couples (aged 18 years and over) were chosen to observe the differences between men and women and because in none of the databases did the number of homosexual couples enable statistically significant calculations to be made. Two-income couples were chosen under the assumption that they are couples in which both members have elements for intra-family negotiation and they are more egalitarian with respect to the mandates of gender in the relationship between women and the job market (González & Jurado 2009; Sayer, 2010; Ajenjo & García 2011; Kan et al., 2011). The final sample of two-income, heterosexual couple households was comprised of 5,730 homes in Argentina, 1,671 in Chile, 1,771 in Spain, and 966 in Uruguay, the latter with the smallest population out of the four countries. A description of the relevant variables is given below (Table 3) to characterize the sample.

TABLE 3. DESCRIPTION OF THE SAMPLE: CHARACTERISTICS OF THE MEMBERS OF THE TWO-INCOME COUPLES AND HOUSEHOLDS IN ARGENTINA, CHILE, SPAIN, AND URUGUAY.

Variables of the main members of the household		Argentina N=5.730 households				Chile N=1.671 households				Spain N=1.717 households				Uruguay N= 966 households			
		Women		Men		Women		Men		Women		Men		Women		Men	
		Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Hours per day of (1):	paid work	6.80	3.30	9.31	3.20	7.52	3.49	9.71	3.19	7.02	2.01	8.52	1.91	6.38	3.85	8.31	3.94
	unpaid domestic-care work	6.13	4.39	2.38	2.97	6.11	4.11	2.90	2.79	4.12	2.49	2.00	2.01	5.19	3.76	2.41	2.90
	unpaid domestic work	3.49	1.96	1.26	1.48	4.28	2.68	1.86	1.90	3.14	2.02	1.42	1.62	3.74	2.62	1.58	2.00
	unpaid care work	2.63	3.52	1.13	2.24	1.83	2.71	1.04	1.69	0.98	1.62	0.58	1.13	1.45	2.60	0.83	1.90
	overall workload	12.93	5.06	11.69	4.21	13.64	4.83	12.61	4.05	11.14	2.74	10.51	2.49	11.57	4.91	10.72	4.52
Ratio Women/Men	paid work	0.73				0.77				0.82				0.77			
	unpaid domestic-care work	2.57				2.11				2.06				2.15			
	unpaid domestic work	2.78				2.31				2.21				2.37			
	unpaid care work	2.34				1.76				1.70				1.74			
	overall workload	1.11				1.08				1.06				1.08			
Percentages																	
Age group	18 -29	14.4		9.2		13.7		9.3		5.5		3.1		15.7		10.9	
	30-39	34.0		30.2		25.5		23.7		34.8		27.6		32.3		29.1	
	40-49	30.1		29.9		29.6		28.0		40.4		40.6		27.5		27.2	
	50-59	17.6		22.1		23.8		25.1		17.3		24.3		19.5		22.3	
	60-64	2.9		5.6		4.7		8.1		1.9		4.2		4.0		6.9	
	65-74	1.0		2.7		2.4		5.0		0.0		0.1		0.8		3.5	
	75 and more	0.0		0.3		0.4		0.8		0.0		0.0		0.1		0.1	
Educational level	Basic	19.1		25.4		15.1		17.2		11.8		14.2		15.7		22.0	
	Medium	36.8		42.8		48.2		46.6		52.1		56.9		52.5		59.1	
	High	44.1		31.8		36.7		36.1		36.0		29.0		31.8		18.9	
Socio-professional category	Executive, legal, management and scientific	11.1		16.1		18.6		19.1		29.4		29.5		19.1		15.7	
	Technical, media office	23.3		13.8		23.9		17.7		30.8		19.5		24.9		17.2	
	Services - commercial work	31.3		13.2		20		13.2		20.7		11.0		27.8		15.9	
	Agricultural work, official operators	29.6		52.5		9.8		40.2		6.0		31.1		7.3		41.4	

	Non-qualified/not classified	4.7	4.4	27.8	9.9	13.1	9.0	21.0	9.9
Weekly hours worked	up to 20 hours	25.1	5.1	19.6	4.4	13.7	1.7	28.6	15.6
	21-40 hours	46.5	33.4	33.3	21.2	73.8	66.6	37.5	23.4
	more than 40 hours	28.5	61.5	47.1	74.3	12.5	31.8	33.9	61.0
Weekly domestic and care working day	up to 20 hours	46.0	82.7	34.5	75.0	53.1	86.2	31.4	70.0
	21-40 hours	30.0	12.7	40.3	19.0	40.0	12.4	30.9	19.9
	more than 40 hours	24.0	4.6	25.2	6.0	6.9	1.4	37.7	10.1
		Argentina		Chile		Spain		Uruguay	
Household variables		Mean	SD	Mean	SD	Mean	SD	Mean	SD
Total daily hours NPDCW done by the main members of the household (1)		8.51	6.19	9.01	5.61	6.12	3.55	7.70	5.49
Ratio of the NPDCW done by the women		0.76	0.22	0.69	0.21	0.69	0.24	0.70	0.25
Ratio of the income contributed by the women/total income		0.41	0.17	0.37	0.18	0.44	0.10	0.40	0.19
Percentages									
Contribution of home income	Women>Men	26.7		19.7		12.1		27.0	
	Women=Men	9.1		4.7		34.7		2.1	
	Women<Men	64.3		75.6		53.2		70.9	
Type of household	Couple only	17.4		20.5		21.0		23.1	
	Couple with a child 0 -4	24.0		20.8		24.3		23.9	
	Couple with a child 5 -9	20.2		17.7		16.8		17.4	
	Couple with a child 10 -19	26.7		24.2		24.9		23.8	
	Couple with a child + 19	10.8		15.3		12.9		10.1	
	Couple with other + 19	1.0		1.6		0.0		1.7	
Minors in the household	Minors aged 4 years old	29.4		26.4		24.3		23.9	
	Minors 4 and 9 years old	30.1		28.2		23.7		24.7	
	Minors 10 and 14 years old	31.9		25.6		23.3		27.5	
	Minors 15-19 years old	28.8		24.5		20.9		22.6	
Paid domestic service in the home		8.8		12.1		16.4		16.0	

Sample: households made up of couples employed in the job market and receiving a salary. (1) Social time: average and standard deviation of daily hours.
Source: Author's own elaboration based on the Time Use Survey for Spain, INE (2010); the Non-Paid Work Survey for Argentina, INDEC (2013); the Time Use Survey for Chile, INE (2015) and the Time Use Survey for Uruguay (2013).

3.2 Method and measures

The variable analyzed is the NPDCW undertaken inside households. While domestic and care work are not the same, they are considered jointly to advance knowledge of the gender gap in the home, explicitly excluding work done in other homes and community or voluntary work.

To strengthen the comparability of the surveys, the analysis focuses on the regression of the gender gap in the distribution of NPDCW between the members of the couple as a way of controlling for the potential effects of the information collection instruments (stepwise linear regression models applied for each country).

The dependent variable is each member of the couple's contribution to the total time allocated to the household by the two members of the couple, on an average day (workday or weekend) first calculating the total time that the man and the woman dedicate to the home, and then the proportion of the work done by the two members of the household[1]. To facilitate the reading of the data, the figures shown are out of a total of 100 where a value of 50 therefore represents an equal share of the work between the two main members of the household. Contrarily, a value of 100 indicates that it is the woman that does all the NPDCW.

As mentioned previously, to explain the NPDCW gap in two-income couples a linear regression model was constructed for each country in which the independent variables were indicators taken from the different micro theories presented previously, comprising a group of variables characteristic of the members of the couple that account for the relative resources of both the women and the men (age, educational level, socio-professional category, and personal incomes) and the time they both spend doing paid work. Characteristics of the home and care needs (type of home in terms of the presence and age of minors, the number of minors, if there is a paid domestic service, and the total NPDCW time the couple contribute to the overall total of the home) were also added. The qualitative variables converted into dummies are used in the four regression models (Table 3). The independent variables should fulfil criteria such as clarity, availability, and comparability.

The comparative analysis among the four countries limits the ability of multilevel regression model to provide robust conclusions about "country effects". Bryan and Jenkins (2016) demonstrates that users requires 25 countries for lineal models and 30 countries for logit models. Last, none of the time use surveys of the countries analyzed included indicators about gender attitudes and values, so these could not be

[1] Times of paid work and NPDCW performed by other household members are excluded.

included in the empirical work with the data bases used . Therefore, we supplement the regression models with descriptive analysis of measured country differences and the detailed considerations of national institutions and policies.

3.3 Empirical Strategy

The main purpose is to predict the effect of several observable characteristics of households and individuals on the gender gap in the distribution of NPDCW between the members of the couple. We estimate one OLS regression for each country. Before presenting the results, we consider that it is worth addressing four issues regarding the econometric strategy.

3.3.1 Regression Diagnostics

This section presents the analysis carried out that allows checking the adequacy of the proposed model. A regression diagnostic is one of a set of procedures available for regression analysis that seek to assess the validity of a model in any of a number of different ways and allows to evaluate if a model appropriately represents the data of their study This assessment may be an exploration of the model's underlying statistical assumptions, an examination of the structure of the model and the study of subgroups of observations (Altman & Krzywinski, 2016). For reasons of length and simplification, the analyzes are presented for the Spanish data. The results for the rest of the countries analyzed follow the same trends.

The partial regression plots and tests of normality (Kolmogorov-Smirnova test), for the quantitative variables, are presented in Annex 1 and Annex 2. These plots allow to check the conditions of linearity and homoscedasticity. To remove asymmetry, the two income variables have been transformed into a logarithmic variables.

Also, note that it has been found that there are no unusual, with high leverage and influential data that may be influencing the model. The easiest way to detect them is through residues. (Nurunnabi & Imon, 2009). Annex 3 presents the results of the examination of the residuals: the distribution of the residuals (normal distribution and homoscedasticity), residuals versus the explanatory variables and the predicted values. The graphs show that the relationship is linear, the residuals being distributed randomly around zero and maintaining the same dispersion and without any specific pattern. The model is well-fitted since there is no pattern to the residuals plotted against the fitted values.

3.3.2 Multicollinearity

We have performed a test to measure the Variance Inflation Factor (VIF) to detect multicollinearity between the different independent variables in our models. The primary concern is that as the degree of multicollinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients can get wildly inflated. Annex 4 presents the results of the variance inflation factor (VIF) and the tolerance (1/VIF), where we conclude that the use of these independent variables does not pose a severe problem regarding multicollinearity.

3.3.3 Endogeneity of the variables

In our model specification, the theoretical model, the endogenous outcome is each member of the couple's contribution to the total time allocated to the household by the two members of the couple, and the exogenous variables (Xs) are characteristics of the home and care needs and a group of variables characteristic of the members of the couple that account for the relative resources of both the women and the men and the time they both spend doing paid work.

But what if the endogenous variable can also generate effects on some Xs?. Strictly, "endogeneity" refers to the correlation between explanatory variables and errors (the residuals or errors of the regression). The endogeneity problem occurs when the independent variable is correlated with the error term in a regression. This result does not occur in the model proposed where the correlations between the independent variables and the residual are approximately 0. This correlation can occur due to an «inverse» causal relationship, that is, when the dependent variable of response (endogenous) results in any of the covariates, when there are relevant exogenous variables that have been omitted from the model, or when these same variables they are subject to measurement errors. In this situation, the generally adjusted model produces biased and inconsistent estimates.

In our model, it can be argued that most of the explanatory variables used meet the necessary (but not sufficient) condition of being a temporal antecedent to the explanatory variable. But it is reasonable to believe that in certain variables like income, the hours of paid work and paid domestic service in the home, the relationship may run in both directions (Altuzarra et al., 2020). In this hypothetical situation the use of instrumental variables (IV) is an empirical strategy to deal with endogeneity. The instrumental variables are assumed to be correlated with the potentially endogenous explanatory variable and uncorrelated with the dependent variables.

But, identifying instrumental variables is extremely difficult in the international comparative context that is presented, with the databases used and with the explanatory factors indicated by the initial theoretical models. For this reason and as certain authors point out (Altuzarra et al., 2020; Antonakis et al., 2010), it is better not to use the IV strategy since this situation does not significantly affect the results obtained.

On the other hand, the revised bibliography agrees that the exogeneity assumption has limited utility in various thematic fields. It is even pointed out that understanding them as problems (to avoid) can be debatable insofar as, from the theory itself, it is expected to observe, for example, simultaneity between variables. Therefore, we could argue that, in the social sciences in general, it is more reasonable to expect the violation of this assumption frequently and for a wide thematic diversity. Some authors place this debate in the tradition of the field of psychology and sociology on the treatment of endogeneity (Antonakis et al., 2010).

3.3.4 Estimated Method: Hierarchical Regression Analysis

The Hierarchical Regression Analysis allows you to examine how predictor (independent) variables are selected and entered into the model. The stepwise regression is useful because we have a very large number of potential predictor variables and want to determine (statistically) which variables have the most predictive power. So, this is a framework for model comparison rather than a statistical method. In this framework, you build several regression models by adding variables to a previous model at each step. In many cases, our interest is to determine whether newly added variables show a significant improvement in R2 ("optimal" set of predictors), limiting the number of predictors without significantly reducing the R2 coefficient. Therefore, it allows to build sequential (nested) regression models by adding variables at each step. Table 4 shows the results for the countries analyzed.

TABLE 4. HIERARCHICAL REGRESSION. STEP AND NUMBER OF VARIABLES INCLUDED FOR ARGENTINA, CHILE, SPAIN, AND URUGUAY. GENDER GAPS IN NPDCW

MODEL 1. ARGENTINA				MODEL 2. CHILE				MODEL 3. SPAIN				MODEL 3. URUGUAY			
	Adj R2	R2 Change	F Change		Adj R2	R2 Change	F Change		Adj R2	R2 Change	F Change		Adj R2	R2 Change	F Change
Total hours of NPDCW	.050	.050	1271.131*	Income Female (log.)	.037	.037	64.201*	Income Female (log.)	.050	.051	172.406*	Income Female (log.)	.031	.032	61.438*
Income Female (log.)	.078	.028	733.854*	Hours paid work Male	.063	.026	46.119*	Age Female	.092	.042	149.853*	Hours paid work Male	.059	.029	56.695*
Hours paid work Male	.093	.015	399.315*	Total hours of NPDCW	.066	.005	8.026*	Hours paid work Male	.125	.033	120.996*	Age Female	.070	.011	21.811*
Hours paid work Female	.107	.014	388.142*	Hours paid work Female	.072	.006	10.688*	Hours paid work Female	.133	.008	31.438*	SP2 Female	.079	.009	19.070*
N[a] minors in household	.119	.011	311.422*	SP4 Male	.076	.004	7.783*	Total hours of NPDCW	.143	.011	40.084*	Couple + other + 19	.083	.005	10.474*
Age Female	.125	.007	184.672*	SP1 Male	.079	.003	5.976**	SP1 Male	.148	.005	19.596*	SP1 Male	.087	.004	8.916*
SP2 Male	.129	.004	97.180*	Income Female>Male	.080	.002	4.234**	Household child + 19	.150	.002	8.013*	Hours paid work Female	.091	.004	8.382*
Paid domestic and care work Yes	.130	.001	40.941*	Educational Male medium	.083	.003	4.898**	SP4 Male	.152	.002	8.507*	Total hours of NPDCW	.093	.003	5.631**
Educational Male basic	.131	.001	34.170*	Educational Male basic	.087	.005	8.394*	Educational Male medium	.154	.003	9.633*				
Household child + 19	.132	.001	30.845*	SP1 Male	.088	.001	2.608-	Educational Male basic	.157	.003	12.172*				
Income Female<Male	.133	.001	25.258*					Household child 5-9	.159	.002	7.185*				
Household child 5-9	.134	.001	23.809*					Household child 10-19	.161	.002	9.345*				

Household child 0-4	.136	.002	47.010*					Household child 0-4	.163	.003	10.693*				
Household child 10-19	.142	.007	189.684*					SP1 Female	.164	.001	4.855**				
Income Female>Male	.143	.001	21.763*					Income Female>Male	.165	.001	3.063***				
SP4 Female	.144	.001	17.413*					Paid domestic and care work Yes	.165	.001	2.197-				
SP3 Male	.144	.000	9.109*												
Female Medium	.145	.000	10.613*												
Educational Female Basic	.145	.001	16.097*												
SP3 Female	.145	.000	1.013***												
SP4 Male	.146	.000	6.657*												
SP1 Male	.146	.000	12.625*												
Couple + other + 19	.146	.000	5.840***												
Age Female	.146	.000	2.458-												

* P-value < 0.01, **P-value < 0.05; *** P-value < 0.10: - P-value > 0.10

Socio Professional categories: SP1 Executive, legal, management and scientific; SP2 Technical, media office; SP3 Services and commercial work; SP4: Agricultural work, official operators

Sample: households made up of employed couples, who receive a wage for this work.

Source: Author's own elaboration based on the Time Use Survey for Spain, INE (2010); the Non-Paid Work Survey for Argentina, INDEC (2013); the Time Use Survey for Chile, INE (2015) and the Time Use Survey for Uruguay (2013).

4 Results

First (Table 3), the time variables show that for all the countries the women's overall workload is greater than the men's, with Argentina the most unequal country regarding the relationship between men and women. In terms of daily NPDCW, Spain has the smallest ratio between men and women with women spending almost double the time as men, followed by Chile, Uruguay, and last Argentina, where the time gap is greatest with the women contributing up to three times more work than the men. These figures show a strong feminization of NPDCW and less female participation in paid work in the four countries, with the differences in Argentina the most critical in descriptive terms. Therefore, it was shown that there is a greater gender gap in the countries where attitudes to assigning jobs according to gender relations persists.

Regarding the results of the linear regression models (Table 5), the first observation is that the variance of the variable gender gap in NPDCW explained by the set of independent variables has very little explanatory power: 16.5 percent in Spain, 14.6 in Argentina, 9.3 percent in Uruguay, and 9.0 percent in Chile.

This enables us to advance the idea that relative resources and their impact on the negotiating capacity of the members of the household contribute little to understanding the distribution of time use in NPDCW. In addition, the hierarchy and magnitude of the most relevant factors to explain the NPDCW gap between men and women (beta parameters) is different among countries (the total number of hours the principal members of the household spend on NPDCW in Argentina; and the hours men spend doing paid work in Chile, Uruguay, and Spain) support the relevance of the visualization of gender roles (hypothesis 3).

In Spain, age has an equally important effect on the distribution of NPDCW as the time men spend doing paid work: the younger the age, the less the inequality. This finding evidences the trend of the generational change in gender attitudes and relations in two-income couples in Spain and hence the greater explanatory capacity of this variable compared with the others.

In the case of Uruguay, together with the time men spend doing paid work, the larger the woman's income the narrower is the gender gap in NPDCW within the couple relationship.

TABLE 5.. LINEAR REGRESSION MODELS (OLS) FOR ARGENTINA, CHILE, SPAIN, AND URUGUAY. GENDER GAPS IN NPDCW

	Argentina				Chile				Spain				Uruguay			
	B		SE B	β	B		SE B	β	B		SE B	β	B		SE B	β
(Constant)	89.28	***	1.95		79.77	***	8.30		86.12	***	8.74		91.89	***	6.97	
Total hours of NPDCW	-1.011	***	0.02	-.28	-0.20	**	0.09	-.05	-0.84	***	0.12	-.13	-.26	**	.11	-.05
Income Female (log.)	-2.46	***	0.21	-.09	-1.62	***	0.64	-.08	-6.82	***	1.23	-.13	-3.60	***	.71	-.13
Income Male (log.)	(2)			*.01(1)*	(2)			*.030(1)*	(2)			*-.02(1)*	(2)			*.05 (1)*
Hours paid work Female	-0.91	***	0.05	-.14	-0.59	***	0.17	-.10	-1.52	***	0.21	-.13	-.51	**	.16	-.08
Hours paid work Male	0.94	***	0.04	.14	1.07	***	0.16	.16	2.10	***	0.22	.16	1.22	***	.15	.18
Age Female	0.30	*	0.19	.02	0.21	**	0.09	.12	(2)			*.04(1)*	.18	***	.05	.08
Age Male	1.25	***	0.22	.06	(2)			*-.08(1)*	0.45	***	0.06	.16	(2)			*-.00(1)*
EDucational level Female [category of the variable omitted high]																
EDFemale basic	2.25	***	0.49	.04	(2)			*.01(1)*	(2)			*-.02(1)*	(2)			*.02*
EDFemale medium	1.95	***	0.34	.04	(2)			*-.01(1)*	(2)			*-.00(1)*	(2)			*.00*
EDucational level Male [category of the variable omitted high]																
EDMale basic	1.83	***	0.37	.04	4.94	***	1.59	.09	5.58	***	1.55	.08	(2)			*.04*
EDMale medium	(2)			*.00(1)*	5.14	***	1.19	.12	5.29	***	1.16	.11	(2)			*-.02*
SocioProfessional category Female [category of the variable omitted no qualifications/not classified]																
SPFemale_1	(2)			*-.01(1)*	(2)			*-.01(1)*	-2.12	**	0.98	-.04	(2)			*-.03*
SPFemale_2	(2)			*.00(1)*	(2)			*-.01(1)*	(2)			*-.02(1)*	-5.73	***	1.36	-.10
SPFemale_3	-1.86	***	0.34	-.04	(2)			*-.00(1)*	(2)			*.01(1)*	(2)			*.00*
SPFemale_4	(2)			*.01(1)*	(2)			*-.00(1)*	(2)			*-.00(1)*	(2)			*.02*
SocioProfessional category Male [category of the variable omitted no qualifications/not classified]																
SPMale_1	-2.67	***	0.74	-.05	(2)			-.02	5.65	***	1.16	.11	(2)			*-.03*

SPMale_2	-6.17	***	0.74	-.10	(2)			*.03(1)*	(2)			*.00(1)*	(2)			*-.04*
SPMale_3	-4.04	***	0.73	-.06	-4.01	***	1.47	-.07	(2)			*-.02(1)*	(2)			*.03*
SPMale_4	-2.89	***	0.65	-.06	(2)			*.01(1)*	4.1	***	0.93	.08	3.68	**	1.16	.07
Type of Household [category of the variable omitted Household with a couple only]																		
child 0-4	8.19	***	0.57	.16	(2)			*.03(1)*	3.80	***	1.27	.071	(2)			*-.01*
child 5-9	8.25	***	0.55	.15	(2)			*-.00(1)*	5.92	***	1.29	.094	(2)			*.01*
child 10-19	6.69	***	0.48	.13	(2)			*.02(1)*	4.80	***	1.18	.087	(2)			*.03*
child + 19	5.95	***	0.55	.08	(2)			*.01(1)*	7.16	***	1.56	.095	(2)			*-.02*
Couple with others +19	3.28	**	1.37	.01	(2)			*-.02(1)*	(2)			*-.00(1)*	14.75	***	4.33	.08
Contribution to the household income [category of the variable omitted Female=Male]																		
Female>Male	2.67	***	0.51	.05	-3.15	**	1.35	-.06	-2.20	*	1.31	-.03	(2)			*-.01*
Female<Male	3.44	***	0.48	.07	(2)			*-.01(1)*	(2)			*-.00(1)*	(2)			*.00*
N[a] minors in household	0.69	***	0.14	.04	(2)			*.03(1)*	(2)			*.03*	(2)			*.03*
Paid domestic and care work in the household [category of the variable omitted No]																		
Paid DCW	2.8	***	0.50	.04	(2)			*-.02(1)*	1.70	*	1.14	.026	(2)			*-.00*
F Statistic (df)	180.69 (23)				17.05 (10)				41.01 (17)				24.97 (8)			
Adjusted R2	0.15				0.09				0.16				0.09			

* P-value < 0.10; ** P-value < 0.05; *** P-value < 0.01

(1) For the non-statistically significant variables, the standardized regression coefficient is the "beta in".

(2) Non-statistically significant variables with a value -P> 0.10. These variables are excluded from the model.

Sample: households made up of employed couples, who receive a wage for this work.

Socio Professional categories: SP1 Executive, legal, management and scientific; SP2 Technical, media office; SP3 Services and commercial work; SP4: Agricultural work, official operators

Source: Author's own elaboration based on the Time Use Survey for Spain, INE (2010); the Non-Paid Work Survey for Argentina, INDEC (2013); the Time Use Survey for Chile, INE (2015), and the Time Use Survey for Uruguay (2013).

The relevance of the visualization of gender roles is also observed within the context of the indicators of time availability for all four countries: an increase in the number of hours women spend doing paid work reduces the gender gap, and when it is the man who increases their daily commitment to doing paid work, the time they spend on NPDCW consequently reduces, widening the gender gap. Equally important is the fact that men's increased commitment to paid work has an amplifying effect on inequality, which is much greater than the diminishing effect observed when it is the woman who increases the time they spend on paid work outside the home (-0.51 and 1.220 for men and women in Uruguay).

Regarding relative resources (hypothesis 1), women's income is the most important variable to explain the inequality in the distribution of NPDCW between the two principal members of two-income couple households. In the four countries analyzed, women's higher incomes have the effect of narrowing the inequality gap. In Argentina, the gender gap widens in households where women and men contribute unequally to the household income (including when it is the woman with the largest wage: 2.67). Contrary to the postulates of the theoretical perspective of relative resources, this situation may evidence the decreased negotiating capacity of Argentinian women, and the strength and influence of gender norms and values in the distribution of domestic work.

Women's other relative resources such as educational level and socio-professional categories play a lesser role and may be linked to the fact that the socio-economic stratification of women is engulfed in gender relations.

Regarding educational level, it can be observed that except for Argentina a higher educational level does not impact on reducing inequality.

In Chile, women's socio-professional category has no significant effect on narrowing the gender gap, while in Spain and Argentina, on the other hand, there is less inequality in the highest female category (legislative and judicial power; management and technical, professional and scientific). In Uruguay this effect can be observed in women in medium-level technical jobs and those who work in administration and in offices.

Meanwhile, men's relative resources (hypothesis 2) and their educational level and socio-professional category are more consistent and have a greater magnitude, especially in the case of Argentina. Their relative positions have a greater impact on the time they spend on NPDCW and, consequently, on the gender gap in the household. However, the presence of the lowest educational levels among the men in Argentina, Chile, and Spain exacerbates the inequalities in NPDCW between men and women. In the case of Uruguay, educational levels are not statistically significant, while income and socio-professional categories are.

This could be an indication of the more diverse male gender ideologies and values, and male socio-economic stratification having a greater effect on the gender gap. To this effect, the measures of gender role attitudes may be affected by the cultural context in which someone lives and their personal experience (especially by their family situation and labor force participation)

Last, the care needs of the household (the presence of offspring) is one of the fundamental factors accounting for both the distribution and the gender gap in NPDCW, although its significance varies depending on the country.

The results show that the presence of minors in the household increases the amount of NPDCW but does not have a significant effect on the unequal distribution pattern between the two members of the couple (in Chile and Uruguay), or the significant effect is to increase the inequality between men and women (household with child0-4: 9.19 in Argentina and 3.80 in Spain).

The fact that the presence of offspring does not change this inequality is perhaps linked to the practice of externalizing care to unpaid care-taking by other family members, which prevents the gender gap between the members of the couple from widening and the care work load from increasing. The peculiarities of the different welfare systems must be therefore be contemplated.

Regarding the age of the couple, the results evidence the changes in the youngest two-income couples, with specificities depending on the country. Argentina is the only country where the age of both the women and the men have the same significant effect: the younger the couple, the greater the equality. Contrarily, in Chile and Uruguay the narrowing of the gender gap is spearheaded by the young women, and not the men, with unequal patterns persisting for this age group of men. In Spain, on the other hand, the age of the women does not have a significant effect. In other words, unequal behaviours persist whatever the age group and the variable that does produce a narrowing effect on the gap is the age of the men.

Last, another result which approaches the ideology of gender is the fact that in households where somebody is paid to do domestic work, the effect is a reduction in the workload undertaken by the men but not that of the women. It is likely that the women reduce part of the most routine and easily externalizable NPDCW they do in the household, but they continue to manage, organize, and "oversee" this work.

5 Discussion and Conclusions

The present exploratory work models the NPDCW gaps between men and women in two-income couples in Argentina, Chile, Spain, and Uruguay. Noteworthy among the main findings is that in the four countries

women do an average of 70 percent of the NPDCW and that the explanatory capacity of the models, which incorporate individual, relative resources, and typical household variables, is generally low. In fact, the little weight of the individual variables and their effect and different magnitude in the countries demonstrate the importance of social representations of gender in accounting for the gender gap in NPDCW.

The comparison between countries evidences the importance of the social context and less egalitarian social and cultural values. In Argentina, Chile, and to a lesser extent Uruguay, androcentric social and cultural norms persist more strongly, and men and women tend to allocate jobs according to gender relations (consistent with the 3rd hypothesis).

The gender gap in Argentina is wider and the effects of the relative resources and socio-economic stratification variables for both the men and the women are greater. Gender inequalities interact and are mutually reinforced with the inequalities of the social relations of production. Consequently, women with a lower socio-economic status and those from the least advantaged households suffer greater inequality in terms of non-paid household work.

In Chile and Uruguay, the gender gap is barely explained by the individual characteristics model. Contextual elements and the markedly unequal gender ideology are the factors underlying the sexual division of work. The androcentric values that persist in Chilean society are fully manifest in a context where women's relative resources have little impact on the gender gap inside households and it is male attitudes and values that have the greatest impact on the time men spend on NPDCW. In other words, most of the factors do not contribute to fomenting change in the present inequality between men and women, except for women's incomes, the household workload, the paid-work done by men and women, the age of the women, and more cautiously some socio-occupational categories. The fact that the presence of offspring does not change this inequality is perhaps linked to the practice of externalizing care to the grandmothers, which prevents the gender gap between the members of the couple from widening and the care work load from increasing.

For men, the explanatory power of socio-professional categories is greater, particularly in Argentina, where unlike the non-qualified men those in all the socio-professional categories contribute to reducing inequality in the distribution. In the other countries, the significant impact on narrowing the gender gap is observed for specific categories. To this effect, qualitative studies have shown that men with more hierarchical jobs are more traditional in terms of gender both in practice and in their discourse. Both educational level and socio-professional categories require further analysis in future studies, which should consider the

correlation between these variables and the incomes of the smaller, more homogenous population of this country compared with the others.

Spain, with a narrower gender gap, is characterized by the importance of relative resources and men's available time in accounting for the advances towards a more equal division of NPDCW and the transformations in gender ideology among the younger generations, which are more favorable to gender equality.

The results show that the equalizing effects of time availability and gender ideology are stronger for women in more egalitarian countries with women in less egalitarian countries, who benefit less from their individual level assets.

In less egalitarian contexts in terms of gender ideologies, the women who transgress gender norms due to their earning potential reinforce their female gender role inside the home, taking on more NPDCW as a way of compensating for transgressing social and cultural gender values.

The overall NPDCW time load for the couple shows that the more time the principal people in the household spend on this work, the narrower the gap in all four countries. This finding indicates that while the time men spend on this work is little, it increases in situations where the NPDCW load becomes unsustainable for the women.

The effect observed when it is the man who increases their daily commitment to doing paid work is particularly noteworthy: the time they spend on NPDCW consequently reduces, widening the gender gap. In response to this reduction, the women – who are also employed – either take on the work their partner no longer does or they externalize part of this work. The consequences are, therefore, either an increase or an intensification of the women's overall workload or a reduction in the time they spend doing paid work, widening the gender gap and affecting job market participation. Equally important is the fact that men's increased commitment to paid work has an amplifying effect on inequality, which is much greater than the diminishing effect observed when it is the woman who increases the time they spend on paid work outside the home.

Additional analysis shows that other macro-level factors (economic development, female labor force participation, gender norms, and welfare systems) may also influence the division of housework. The results suggest that changes in individual level factors may not be enough to achieve an equal division of housework without the parallel reduction of macro-level gender inequalities. In this sense, one of the

limitations of this study and one of the future lines of research is incorporating macro indicators at the country level and conducting multi-level analysis.

To this effect, the results reinforce the need to incorporate the ideology of gender (subjective indicators) and contextual elements in explaining the gender gap inside households. Four main objectives for further research are proposed. First, in the comparative studies, selected macrosocial indicators, specifically in the welfare states and the national policies related to gender equality, should fulfill criteria such as clarity, availability and comparability. Second, develop analysis strategies and methods that are more robust to small numbers of countries (Bayesian methods for example). Third, comparative studies that include more countries should be developed to test the hypothesis posited relating to contextual and macrosocial elements, especially among diverse territorial realities. Fourth, time use surveys should be accompanied by qualitative studies or questions should be added to the time use surveys themselves that enable information about social representations of gender and care to be collected.

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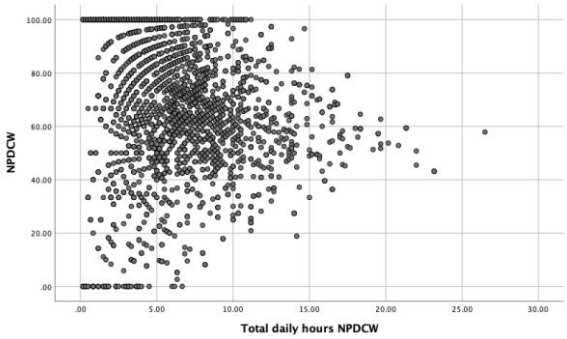
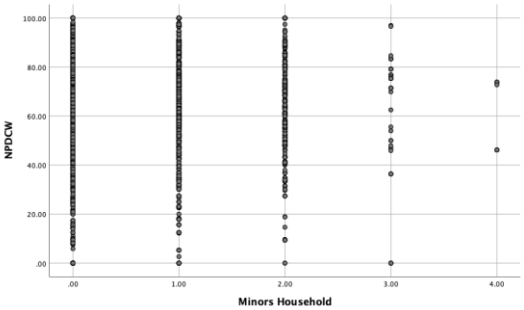
Annex 1- Partials Plots. Dependent Variable by Independent Variables

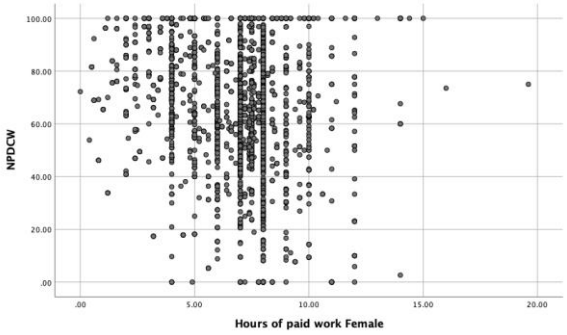
Total hours of NPDCW



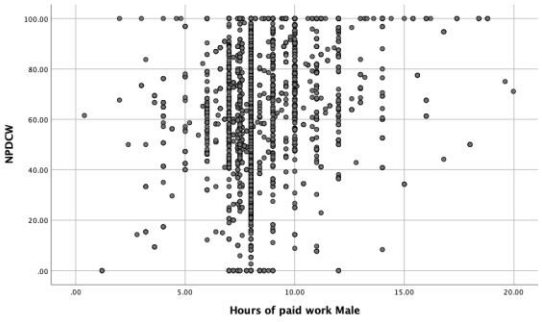
Nº minors in household



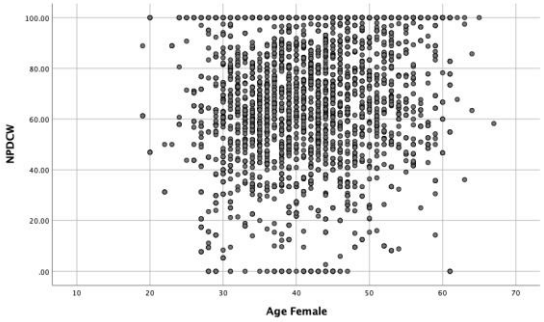
Hours paid work Female



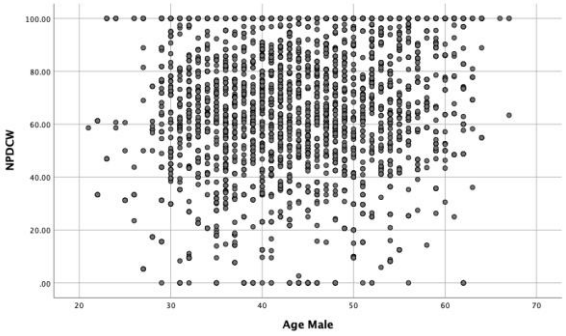
Hours paid work Male



Age Female



Age Male

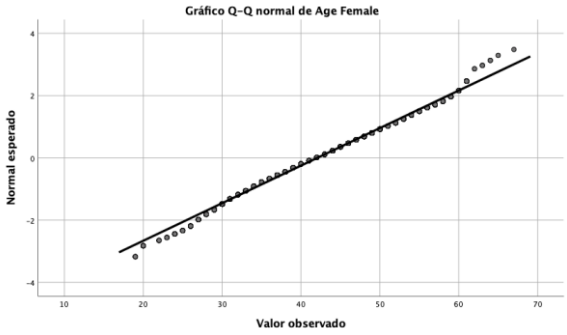


Annex 2- Normality Tests and Normal Probability Plots (Q'Q)

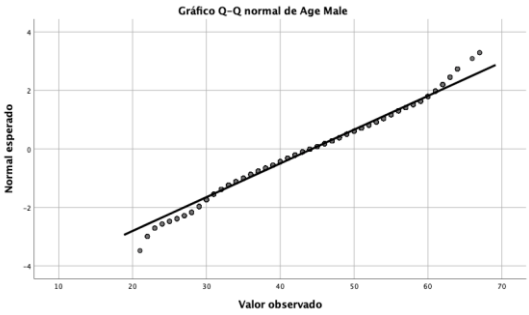
	Kolmogorov-Smirnov test
Age Female	.048***
Age Male	.047***
Hours paid work Female	.198***
Hours paid work Male	.289***
Nª minors in household	.358***
Total hours of NPDCW	.078***

*** P-value < 0.01
Sample: households made up of employed couples, who receive a wage for this work.
Source: Author's own elaboration based on the Time Use Survey for Spain, INE (2010); the Non-Paid Work Survey for Argentina, INDEC (2013); the Time Use Survey for Chile, INE (2015) and the Time Use Survey for Uruguay (2013).

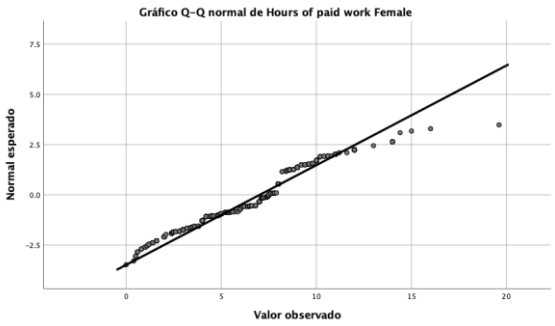
Age Female



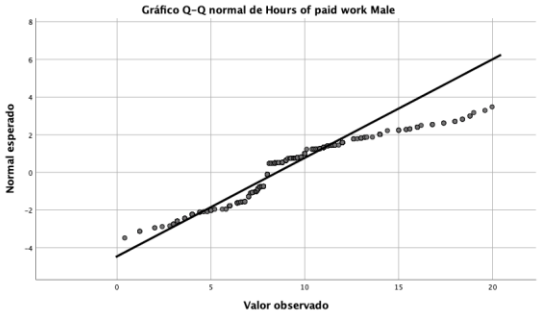
Age Male



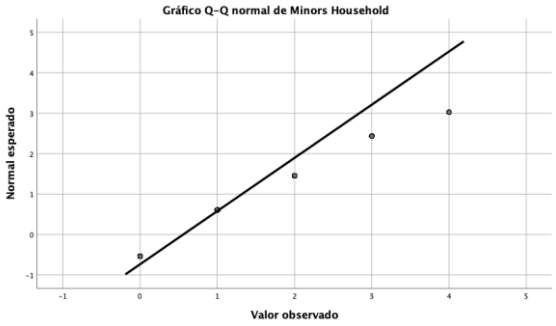
Hours paid work Female



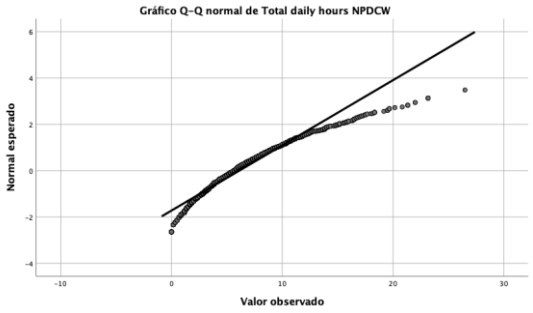
Hours paid work Male



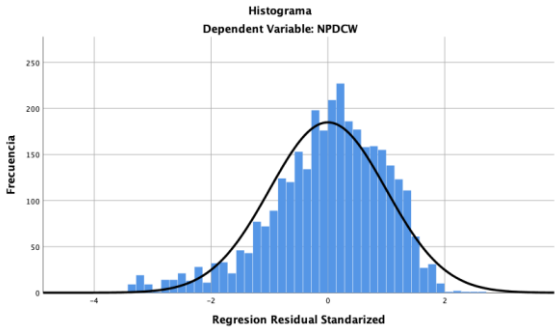
Nº minors in household

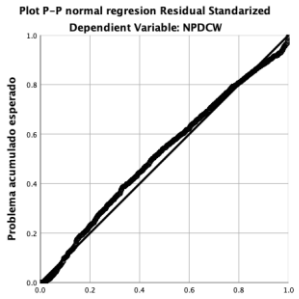


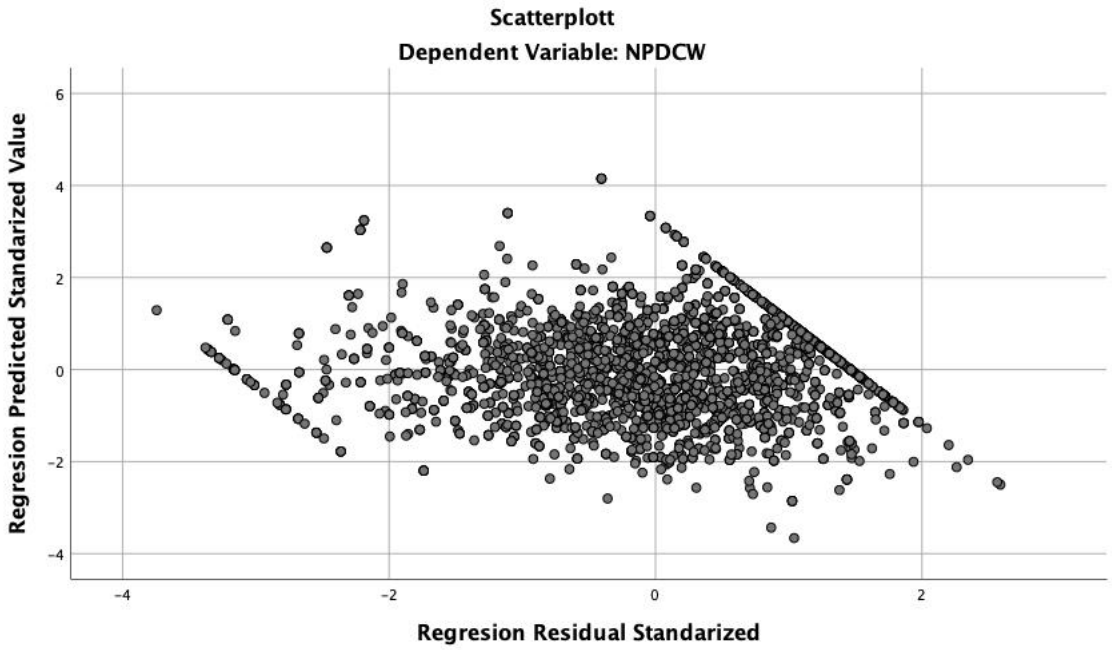
Total hours of NPDCW



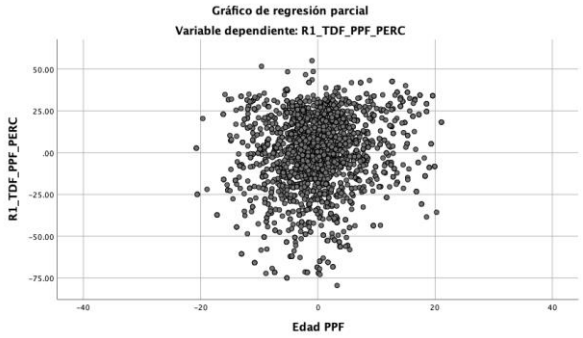
Annex 3. Residuals analysis

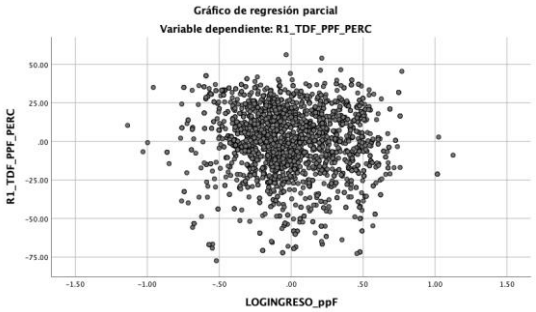


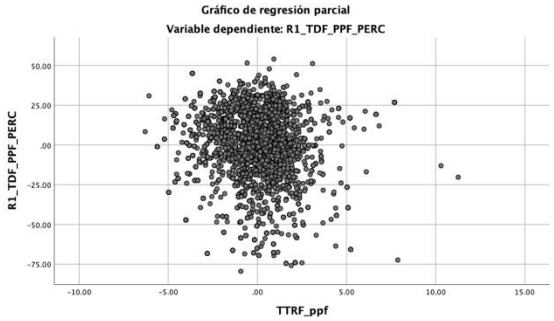


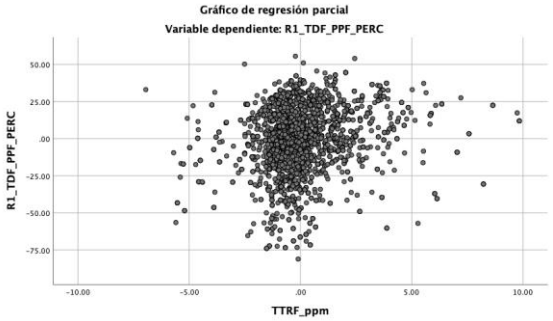


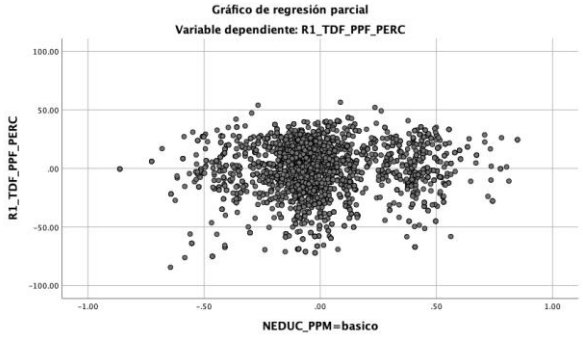
Partial graphics. Scatterplots of the residuals of each independent variable and the residuals of the dependent variable.

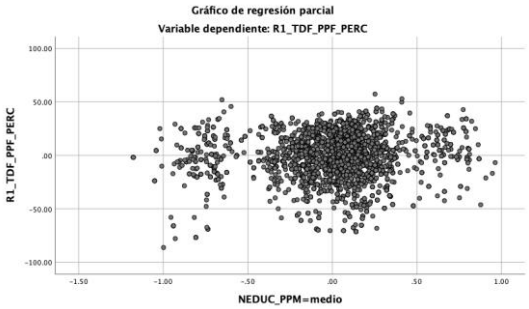


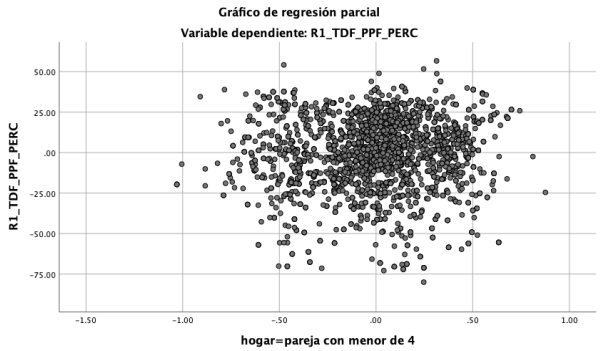


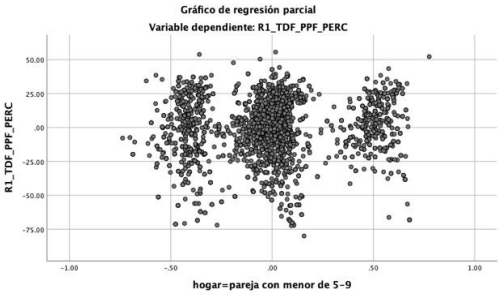


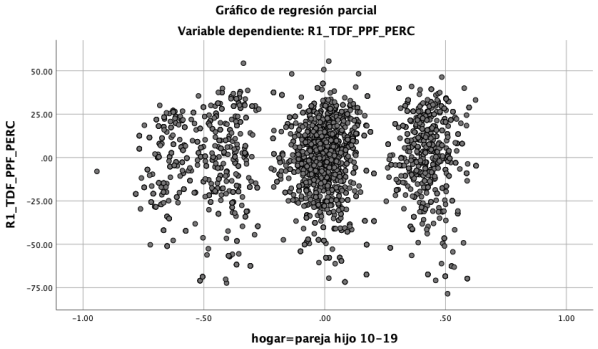








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R1_TDF_PPF_PERC
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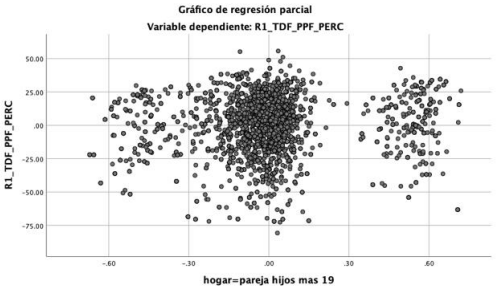
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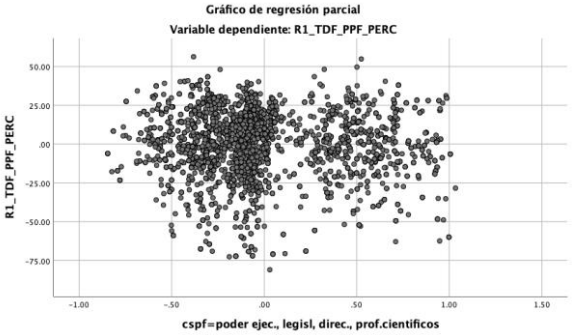
R1_TDF_PPF_PERC
hogar=pareja hijos mas 19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R1_TDF_PPF_PERC
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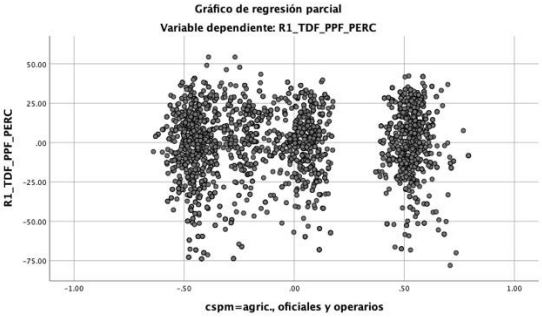
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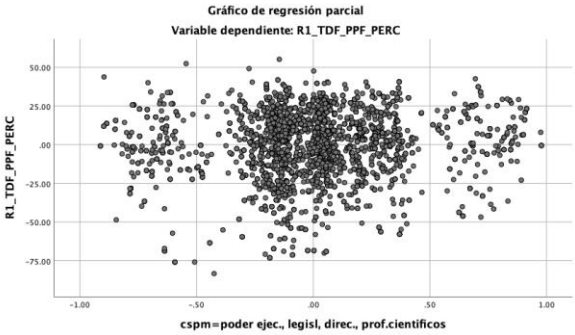
Gráfico de regresión parcial
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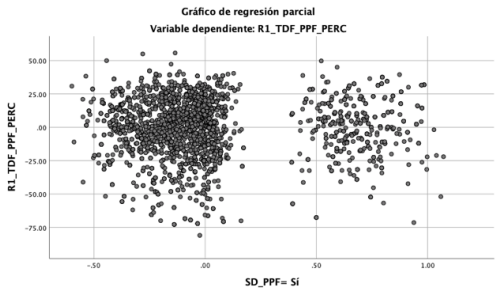
cspm=poder ejec., legisl, direc., prof.cientificos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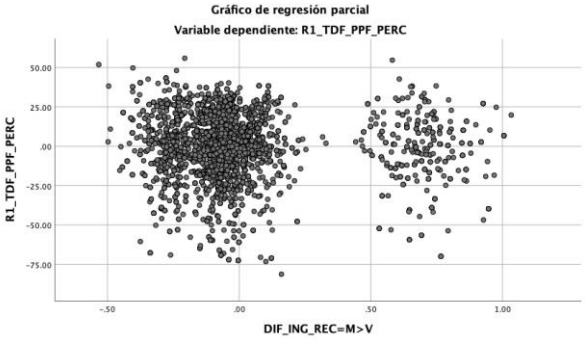
SD_PPF= Sí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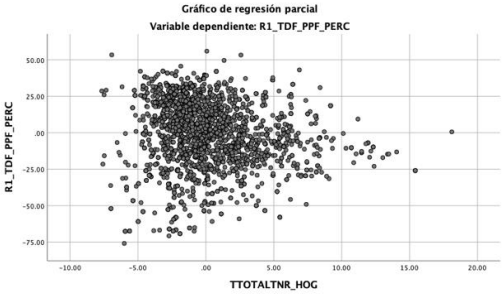
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TTOTALTNR_HOG

Annex 4. VIF Multiclolinearity Diagnostics. Gender Gaps in NPDCW

	Tolerance	Variance Inflation Factor
(Constant)	.617	1.622
Age Female	.493	2.029
Income Female (log.)	.783	1.277
Hours paid work Female	.900	1.111
Hours paid work Male	.509	1.966
Educat. level Male basic	.436	2.294
Educat. level Male medium	.458	2.186
Type of Household child 0-4	.613	1.632
Type of Household child 5-9	.564	1.773
Type of Household child 10-19	.603	1.659
Type of Household child + 19	.747	1.339
SocioProfessional Female Category 1	.776	1.288
SocioProfessional Male Category 4	.525	1.905
SocioProfessional y Male Category 1	.810	1.235
Paid DCW	.791	1.265
Contribution to the household income Female>Male	.773	1.293