



Time and Money spent on Children:
Effect of the (Grand)Parents' Education and Substitution
within Time Allocations

Guillaume Perilleux
ECARES, Université libre de Bruxelles

February 2022

ECARES working paper 2022-04

Time and Money spent on children: Effect of the (grand)parents' education and substitution within time allocations *

Guillaume Périlleux †

Abstract

This paper looks at the link between education of both partners and the time and money they spend on their children. Taking advantage of detailed microdata, it goes one step further than most previous studies as we control for the time constraint faced by the individuals, as well as interdependencies in the time spent in various activities by partners. This is done by performing Seemingly Unrelated Regressions. We see that, while the division of time between men and women is still gendered, it gets more egalitarian when the individuals have a high level of education. Concerning the investments in children, we find that children with parents with a low level of education suffer from less investments from their parents both in terms of time and money. Overall, our results seem to back up the gender ideology theory with education driving the transition from conservative to more egalitarian gender ideology and to be transmitted across generations with grandparents serving as gendered role models for the parents.

Keywords: Childcare, Education, Gender Norms, Transmission, Time use

JEL: D13; D64; J13

1 Introduction

The time parents spend with their children has been shown to be central in their development on several dimensions such as academic achievement, cognition, and language acquisition ([Bianchi, 2000](#); [Dotti Sani and Treas, 2016](#); [Francesconi and Heckman, 2016](#); [Milkie et al., 2015](#)). [Fiorini](#)

*This chapter makes use of the MEqIn dataset, collected by a team of researchers from Université catholique de Louvain, KU Leuven, Université libre de Bruxelles, and University of Antwerp. The collection of the MEqIn data was enabled by the financial support of the Belgian Science Policy Office (BELSPO) through grant BR/121/A5/MEQIN (BRAIN MEqIn). I am indebted to Paula Gobbi, and members of my PhD supervisory committee as well as my thesis jury for fruitful discussions and useful comments. All errors and omissions remain my responsibility.

†ECARES and CEBRIG, Solvay Brussels School of Economics and Management (SBS-EM), Université libre de Bruxelles (ULB). Avenue F. D. Roosevelt 50, CP 139, B-1050 Brussels, Belgium. E-mail: guillaume.perilleux@ulb.be. I gratefully acknowledge financial support from the Fond National de la Recherche Scientifique (FNRS) through an Aspirant grant.

and Keane (2014) even find parental time spent in educational activities to be the most productive input for children’s cognitive skill development. During the last decades, parents in general (i.e. men and women) have been found to dedicate more and more time to it (Bianchi, 2000; Sandberg and Hofferth, 2001, 2005; Sayer et al., 2004), however, mothers still undertake the bulk of it (Craig, 2006). The importance of parental childcare and its undeniable gender perspective has therefore naturally transpired in the policy world with, for instance, the debates around the paternity leaves (their length, whether or not they should be mandatory,...).

From a policy perspective as well as for parents, it is therefore important to understand what factors might influence the time spent at childcare by mothers and fathers alike. Following that premise, researchers have analyzed the evolution of childcare by men and women, as well as its determinants. Education has indubitably been considered as one of those factors. From a theoretical point of view, the effect of education on time spent at childcare could go either way. On the one hand, one could argue that more educated individuals are likely to have higher opportunity costs of time spent not working. We would therefore expect to observe a negative link between education and time spent at childcare. On the other hand, it could be argued, as is done by Chiappori et al. (2017), that more educated parents have larger returns on investment in children’s human capital leading them to spend more time at childcaring. Empirically, most of the studies analyzing the link between education and time spent at childcare found it to be positive (Monna and Gauthier, 2008).

Since time is a limited resource, the time that individuals spend at childcare is constrained by the time they spend on other activities, such as paid work. Furthermore, the time allocations of one’s partner indubitably has ties with the individual’s time allocations. However, given the endogeneity problem linked to controlling for other time allocations, most of the previous studies looking at the impact of parents’ education on the time spent at childcare did not account for the time constraint faced by individuals nor the potential interdependencies in partners time allocations, so that, as pointed out by Connelly and Kimmel (2009), little is known about the joint time use decisions of couples. We believe that taking both these factors into account is of importance as it could give an idea of the potential substitutability that might occur between the various activities for the individuals as well as between the partners. From a policy perspective, this is interesting as well as it could, for instance, give ideas of the potential effects that measures on the labor market could have on other activities such as childcare or domestic work and their division within the households. Previous researchers have, for instance, already shown that countries with mandatory paternity leaves have significantly higher rates of women employment in private firms (Amin et al., 2016).

This study tries to take advantage of the best features of the previous studies and looks at the time spent at childcare by both parents and the factors determining it, with a focus on education. It goes further than most previous studies as it looks at the impact of the interaction of the educational level of both parents on the time they each spend at childcare. Taking this interaction into account appears to matter as we find that men with a higher level of education spend more

time at childcare only when their partner has a high level of education as well. In addition to that, we further account for the time spent in other activities by the individuals and his/her partner. To do so, we perform Seemingly Unrelated Regressions (SUR) to circumvent the endogeneity problem usually faced when using different time allocations both as dependent and independent variables. This allows us to look at the relationship between the various activities composing the time allocations of the individuals, and to see the degree of substitutability between them. It could, therefore, allow us to see ‘at what cost’ does the increase in childcare come for individuals with a higher level of education. It also enables us to include potential intra-household interdependencies in the way that time allocations are defined, a consideration that should allow us to see, among other things, whether the time spent at childcare by partners is correlated or not.

Taking advantage of the MEqIn database, which contains detailed information for Belgium in 2016 on time use of both partners in the interviewed household, as well as detailed measures of consumption both at the household and the individual level, we also examine how the combination of educational level of both partners influences the money that they spend on their children (and on public goods¹ in general). Following [Altintas \(2016\)](#), this allows us to see whether children born in families with a higher socio-economic status and with highly educated parents benefit from a double advantage as, in addition to living in more affluent households, they see more money and more parental time invested in them, with parents that are better at producing their human capital. This could also have clear policy implications, as children born in those families would clearly have different opportunities than the ones born in families with a lower socio-economic status.

While we start from the premise that parental childcare is beneficial for the children, one could argue that it might take different forms and be of different quality levels. In this study, our measure of childcare comes from stylized questions that did not differentiate between the different types of childcare activities and that could be interpreted as recording childcare in broad sense.² We believe that this measure is nonetheless of interest to this study since any time spent with children (even of low quality) is time that is not spent by the individual in another activity. Given our interest for the potential substitutability between activities it is therefore interesting to have a broad childcare definition.

Furthermore, in this study, we do not discuss other forms of child care than parental childcare, such as formal child care (e.g. crèche or daycare). Belgium is often considered to be one of the good pupils in terms the availability of formal childcare amongst the European countries ([Biegel et al., 2021](#)), although there are some regional discrepancies ([Meulders and O’Dorchai, 2008](#)). While we believe that considering the access, cost, and other features of these child care services (and in particular the public ones) is important when thinking of the time allocations of parents and especially when considering the division of the activities between genders, we still think that

¹A precise definition of how we measure the money spent by the household on children and on public goods will be given in Section 3.1, and can be found in Table A.1 in the Appendix.

²In practice, the individuals were asked the following question: “How much time do you spend during a typical week on activities with the children in your household?”.

parental child care is important. Furthermore, since we do not focus only on the time spent taking care of very young children, the effect of heterogeneous access to formal child care on our results is likely to be lower since access to school and pre-school is free in Belgium, resulting in high enrollment rates: 98% between 3 and 15 years old and 92% between 15 and 18 years old in 2015 (OECD, 2021).

Finally, a number of studies have looked at the importance of cultural norms, how they affect economic decisions, and how they are transmitted across generations (Bisin and Verdier, 2011). Following those studies, we look at the level of education of the grandparents and the effect it can have on the time spent at childcare by the parents. While some previous studies looked at the effect of grandparents' education on the female labor market participation, this is, to the best of our knowledge, the first study to look the impact it has on parents' time use, in general, and time spent at childcare in particular. It allows us to see if there is some transmission in the behaviors of parents, and in particular in the link between education and childcare.

Overall, we find that couples in which both partners are highly educated spend more time taking care of their children (mainly through the father), while they only seem to spend less time at domestic work (through the mother). We further find that those couples spend a significantly larger amount of money on their children, although this seems to be mainly due to their higher level of income. This, nonetheless, supports the idea that children in these families benefit from a double advantage. We see that a reduction in fathers' time spent at childcare is correlated with more involvement by fathers in unpaid work. Our results support the gender ideology theory, with education inducing more egalitarian divisions of both paid and unpaid activities within couples. Finally, the results seem to be transmitted over generations, with parents acting as gendered role models for their children.

The rest of the paper is organized as follows. Section 2 exposes the literature related to the research question both on the empirical and theoretical side. Section 3 describes the data used to perform the analyses, the sample selection, as well as the variables considered in this study, and gives some descriptive statistics. Section 4 contains the empirical analysis, divided in two parts. The first part focuses on the education of both parents and the impact its combination has on the time and money that they spend on their children. The second part is concerned with the possibility of a transmission across generations and therefore looks at the educational level of the grandparents and its link with parents' time and money spent on children. Section 5 concludes.

2 Literature review

Most of the studies looking at the link between parents' education and the time they spend on their children find it to be positive (See Monna and Gauthier, 2008, for a review). Among others, Guryan et al. (2008) find a positive education and income gradient in time spent at childcare for the US as well as 14 other countries in the 90's/beginning of the 00's. They further claim that this finding is in opposition with the usually negative gradients observed for typical leisure and home

production activities. [Gobbi \(2018\)](#) for her part finds, for the US over the period of 2003-2013, that the parental time of both parents increases with their own education and that of their partner. While [Gimenez-Nadal and Molina \(2013\)](#) find that the time devoted to educational childcare at the couple level seems to be only influenced by the educational level of the mother.

Other studies looking at the relation between parents' education and parental time further find that, while the amount of time that parents spend with their children increases with their education, the type of time also differ and, in particular, its quality increases ([Monna and Gauthier, 2008](#)).

Finally, some studies look at the evolution of the time spent taking care of the children over time and how this evolution could have diverged for different education groups ([Altintas, 2016](#); [Chiappori et al., 2017](#); [Dotti Sani and Treas, 2016](#)). They find that although the time spent at childcare has increased over time for every groups the increase is more marked in the highly educated group leading to a larger gap between high- and low-educated parent's time investment in developmental childcare activities. They further put forward that this finding, associated with the observed increase in assortative matching could explain part of the inequalities observed between children in families with different socio-economic background.

Those studies already provided quite some evidence on the potential positive link between parents' education and parental time. However, [Schoonbroodt \(2018\)](#) making the distinction between childcare performed during or outside typical working hours (TWH), nuance those conclusions as she finds that the positive income-gradient only remains for paternal care outside of TWH. She further finds a negative income gradient for both men and women during TWH and for women as well outside TWH.

Furthermore, most of the previously cited studies fail to take into account the effect of other time allocations of the partners on the time they spend at childcare.³ [Kimmel and Connelly \(2007\)](#), and [Kalenkoski et al. \(2009\)](#) do so by setting up multi-equation systems to estimate the effect of individual's and household's characteristics on the time spent by the individuals in various activities such as home production, active leisure, market work and child care-giving.⁴ However, while those papers include the wages of the individuals in their analysis, none of them has a direct focus on education.⁵

This study will try to take the best out of the previous studies as we will look at the combination of the education of both partners and its link with time allocations of individuals allowing for interdependencies in the time spent by the individuals in various activities as well as the time spent by their partners. This should allow complementing previous studies by showing 'at what cost' does the increase in time spent at childcare usually observed for individuals with a higher level of education come.

Theoretically speaking, knowing the direction of the link between the parents' level of education,

³Most studies mention the potential impact that other time allocations might have on childcare but do not include them due to endogeneity issues. In this study, this problem will be circumvented with the use of Seemingly Unrelated Regression (SUR) techniques.

⁴Note that [Kimmel and Connelly \(2007\)](#) focus only on women.

⁵[Kimmel and Connelly \(2007\)](#) include the number of years spent in education as a continuous variable but they do not seem to comment the results obtained for that variable.

and the time they (both) spend taking care of their children is of importance as it might question some of the basic hypotheses on which economic models have been based. Among those, the question of whether parental time should be seen as complementary or substitute. [Hallberg and Klevmarken \(2003\)](#), and [Del Boca et al. \(2014\)](#) have recently found evidence that those inputs should be considered as complements rather than substitutes.⁶

An analysis of the time spent at childcare by both parents and its determinants should also help in discriminating between the different theoretical frameworks put forward in the literature to predict parental time investment in children. [Monna and Gauthier \(2008\)](#) group those theoretical contributions, in the sociological literature, into three main groups: gender ideology theories; social and economic exchange theories (including the relative resource perspective and time availability theory), and family systems theories.

The gender ideology theories could ultimately be related to the gender-identity hypothesis developed, in economics, by [Akerlof and Kranton \(2000\)](#). It has further been divided in two ‘versions’ in the literature, the traditional, or conservative, and the egalitarian ([Ashwin and Isupova, 2018](#)).

The social and economic exchange theories could be related to [Becker \(1965\)](#) economic theory of time allocation as they take a pragmatic approach as to how labor is divided within the household. Within this approach, mothers and fathers each specialize in the activities that are the most efficient and functional for their family.

The family system theory, for its part, argues that some relationships within the family can impact other relations between family members ([Belsky and Volling, 2014](#); [Cowan and Cowan, 2014](#)). The idea is that poor relation between the partners could translate into one or both of them becoming less responsive and emotionally available to their children.

Finally, studies have shown that the individuals’ beliefs about gender roles and identity are strongly determined by their parents and peers ([Unterhofer and Wrohlich, 2017](#); [Farré and Vella, 2013](#)). At the same time, a branch of the literature argues that women’s labor market choices and outcomes might be linked to social and gender identity norms ([Bertrand, 2011](#)). Following those two ideas, some studies have shown a positive correlation between the labor supply of women and that of their mothers ([Farré and Vella, 2013](#)), and/or mothers-in-law ([Fernández et al., 2004](#); [Morrill and Morrill, 2013](#)) as well as the labor supply of their adolescent peers’ mothers ([Olivetti et al., 2020](#)). While those studies focus on the labor market, [McGinn et al. \(2019\)](#) even go one step further and look at the impact of mothers’ employment statuses on the employment and domestic outcomes of their daughters and sons. [Papapetrou and Tsalaporta \(2018\)](#), for their part, look at the possibility of an intergenerational transmission of female educational level and labor force participation. Finally, [Kleven et al. \(2019\)](#) look at the intergenerational transmission of child penalties (i.e. the relative labor supply change of women as compared to men around childbirth), and find a link with the maternal grandparents but not the paternal ones. None of these studies,

⁶Note that substitutability/complementarity of the time spent at childcare by both parents can be considered at a precise point in time or over the life-cycle of the children. In this study, given that we make use of cross-sectional data and as we will control for the presence of children of different age categories, we will be closer to contemporaneous complementarity.

however, look at the impact that this potential transmission of norms can have on the intensive margins and hence on the time allocations of individuals.

Following these studies, this paper therefore looks at the effect that grandparents' educational level (both grandmother and grandfather) can have on the time and money that parents (both mothers and fathers) spend on their children, as well as the time they spend in other activities. This should further confirm the potential presence of intergenerational transmission in the gender roles and attitudes of individuals.

3 The MEqIn data

3.1 Database, variables, and sample selection

The analyses in this study will be performed with the use of the so-called MEqIn data. A database that is representative for Belgium in 2016 and that led to the publication of a book by [Capéau et al. \(2020\)](#) analyzing the well-being of individuals in Belgium and the different dimensions that compose their well-being. The MEqIn database is especially suited for the type of analysis performed in this study for different reasons. First of all, it is one of the few databases containing detailed information on time use as well as measures of consumption such as the money spent by the households on their children. It further contains information on the two partners in the households who were both interviewed so that the information for each of them is accurate. Finally, it contains information not only on the educational level of the individuals with children but also on the level of education of the parents of those individuals (i.e. grandparents).

The time variables were recorded, in this database, with the help of stylized questions. That is, interviewed individuals were asked questions such as “*How much time do you spend during a typical week on activities with the children in your household?*”. The main criticisms of stylized questions, as opposed to time diaries, are the potential *social desirability* bias that could be induced by such questions as well as the potential difficulty for respondents to recall their time use over a long period of time ([Monna and Gauthier, 2008](#)). However, time diaries, as they are often recorded for a single day, might suffer from mis-measurement issues ([Foster and Kalenkoski, 2013](#)). Those mis-measurements are less prone to happen with stylized questions. In particular, if, by chance, an individual does not perform an activity on the day she is keeping her time diary, the activity would be coded as a zero for her, even though she might perform it every other day of the week. This is not the case with stylized questions.

A second potential criticism of our measure of childcare relies on the fact that, while some of the previous studies focus on different types of childcare activities ([Gimenez-Nadal and Molina, 2013](#)), childcare was recorded as a whole in the MEqIn database. It could therefore encompass different types of activities that could be considered as childcaring, activities that could have different qualitative levels.⁷ The literature also makes the difference between active and passive

⁷A father bringing his children with him to the bar could consider that as childcaring and it would be recorded similarly to a father spending time helping his children with their homework.

childcare mostly depending on whether childcare could be seen as the primary activity performed by the individual or not (Monna and Gauthier, 2008).⁸

In a sense, one could consider that the childcare variable available in the MEqIn database measures the time spent at active childcare (as opposed to passive childcare), given that they were collected through stylized questions and given the nature of those questions.⁹ While our measure does not allow for a precise analysis of the types of childcare that each parent could specialize in, we believe, as argued in Section 1, that it is still of interest as every hour spent in childcare is an hour not devoted to another activity. Given our aim to introduce the time constraint faced by individuals and our interest for assessing the degree of substitutability between the various activities, it is interesting as well to have a broad measure of the time spent at active childcare. As far as the quality of the time spent with children is concerned, some studies have as well shown that parental time with children, even of lower quality, can have an impact on their outcome. You and Davis (2011), for instance, show that secondary childcare, considered of lesser quality, has an impact on the prevention of childhood obesity that is not marginally lower than primary childcare. For these reasons, we will consider, throughout this study, that every additional hour spent with the children is at best beneficial for them and at worst that it cannot hurt them.

Finally, one could wonder whether this variable should be adjusted by the number of children present in the household. Following previous studies looking at the link between parental childcare and education such as Gimenez-Nadal and Molina (2013), we decided not to do so. We indeed believe that time spend at childcare is not likely to be linearly depending on the number of children in the household, and therefore prefer controlling for the number of children in the household when performing the regression analyses as was done in previous studies.¹⁰

Concerning the other variable of interest in this study, the educational level of the individuals, as explained in the Introduction, in this study we want to look at the effect of the combination of the educational level of both partners, as we believe that accounting for this interaction is of importance when looking at the relation between education and time spent at childcare. To do so, we create a variable defining different types of couples. We define four different types of couples: *Low-Low*, *Low-High*, *High-Low*, *High-High*, where the first term corresponds to the man's level of education and the second one to the woman's. In order to have a reasonable number of categories, we considered only the individuals with a tertiary education as opposed to those without. For simplicity, we decided to refer to the first ones as having a high level of education and to the second ones as having a low level of education, although this is clearly an abuse of language.¹¹

⁸Some studies refer to primary and secondary childcare instead (Zick and Bryant, 1996).

⁹As explained before, the individuals were asked the following question: “*How much time do you spend during a typical week on activities with the children in your household?*”. They were also asked the same question about the time they spend at other activities such as leisure and domestic work, two activities that have been shown to be the chief sources of secondary childcare time (Cardia and Gomme, 2018).

¹⁰We, nonetheless, perform the analyses with time and money spend per children. The results are presented in Section 4.2.

¹¹We decided to create such a categorical variable for education instead of a continuous one for several reasons. First the educational level of individuals was collected in the MEqIn database through answers to the question “*What is the highest level of education you have successfully completed?*”, with answers defined as categories such as *Primary education*, *Lower secondary education - General*, or *Upper secondary education - Technical*, or even *Doctoral degree with thesis*. While those categories could be turned into number of years, the created variable will not really be continuous. Furthermore, having those groups of couples by educational levels could be seen as being in

As mentioned in the Introduction, this study also examines how the combination of educational level of both partners influences the money that they spend on their children (and on public goods). The variable used for the money spend on children measures the monthly household spending on children (including food and transport), while the variable used for the money spent on public good corresponds to the monthly household spending on utilities, outings and restaurants, vacations, common transport, and (virtual) rent. More information on the collection and construction of the variables used in this study can be found in Table A.1 in the Appendix.

The other variables considered in this study are variables typically used as controls in previous studies on the link between education and time spent at childcare (Kimmel and Connelly, 2007; Connelly and Kimmel, 2009; Gimenez-Nadal and Molina, 2013). They include: the individual's age (and its square), (self-declared) health status of both partners, the number of children in the household, whether there are other adults in the household, the logarithm of the household non-labor income, three dummy variables indicating whether there are children under 3 years old, between 3 and 6, and between 6 and 12 in the household,¹² and the region where the household lives. Controlling for the household composition is of importance as the need for childcare is different depending on the number of children in the household, their age, but as well on whether there are other adults in the households that can help for the unpaid activities. Health status has been shown to impact the time mothers spend at labor market by Kalenkoski et al. (2005), while Gimenez-Nadal and Molina (2013) show that mothers declaring to have a good health spend more time at educational childcare. Following this last study we decided to control for non-labor income since it is likely related to time use, and since labor income would be endogenous (in particular with the time spent at paid work).¹³ The idea is that non-labor income is expected to reduce the need for paid work and could therefore lead to a shift from paid work to leisure activities. As argued by Kimmel and Connelly (2007), the effect on unpaid work activities is nonetheless ambiguous as, for childcaring, it could be argued to be work as well as leisure, while for housekeeping, a higher non-labor income could mean a bigger house, or more things to manage. Finally, the regional variable could capture differences in preferences over time allocations as well as differences in the price of commodities for instance. It should further capture differences in the actual price of outsourcing housework since Belgium has a Service Voucher Scheme in which households can pay for certain domestic services with subsidized vouchers, and since the size of the subsidy depends on the Region, although to a limited extend (see Leduc and Tojerow, 2020, for a description of the program).

The sample used in this study is composed of heterosexual households with children under 18

line with the sociological literature on social classes and their reproduction. In particular, one can link the analysis of how highly educated individuals invest more in (educational) childcare to Bourdieu's work on the importance of the transmission of cultural capital in addition to economic capital on the reproduction of inequalities. Note however that in Bourdieu and Passeron (1964) and Bourdieu and Passeron (1970), the authors were focusing more on the role of schooling. In Bourdieu's vision, schools far from promoting equal opportunities, participate in the reproduction of social inequalities and legitimize these inequalities through a meritocratic discourse. The school indeed transmutes the differentiated inheritance of certain cultural dispositions into social inequalities and makes these inequalities acceptable by attributing them to the personal merit of the students (Jourdain and Naulin, 2011).

¹²Those thresholds correspond to the age limits at which children can enter kindergarten, primary school, and secondary school respectively in Belgium.

¹³We however control for the inclusion of disposable income as a robustness test of our results in Section 4.2.

and in which both parents were interviewed. We further removed from the sample the households with grandparents living with their children, the households in which at least one of the two parents was retired, four households with individuals who presented inconsistencies in the time allocations that they reported,¹⁴ and three households containing individuals on whom we had no information (on whether they were children of the partners, siblings,...). This leaves us with 267 households composed of two partners with children under 18 years old, and potentially other adults.¹⁵

3.2 Descriptive statistics of the sample considered

Table 1: Mean household and individual characteristics and frequencies

	Man	Woman		Household
Variable	(1)	(2)	Variable	(3)
	Age of	41.031	Equivalized monthly	1948.043
	respondent	(0.482)	income	(66.691)
Working status	Not working	0.062	Monthly non-labor	596.973
		(0.016)	income	(44.782)
	Employed FT	0.859	Number of children	1.876
		(0.023)		(0.071)
	Employed PT	0.079	Other adults in	0.143
		(0.018)	household	(0.023)
Health	Good	0.376	Children under 3	0.270
		(0.032)		(0.029)
	Low	0.523	Children between	0.305
		(0.033)	3 and 6	(0.031)
	High	0.100	Children between	0.461
		(0.019)	6 and 12	(0.033)

Note: * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Standard errors are in brackets. The table shows the average characteristics for men and women in the sample as well as the average household characteristics. The Equivalized income was constructed by the data manager by dividing the household income with the OECD equivalence scale.

Table 1 gives us an idea of the average characteristics of the individuals composing our sample. We can see that both men and woman composing the sample are on average around their forties with the men being slightly older by approximately two years and a half. Most of the individuals in the sample declare to be working (93.8% for the men and 80.3% for the women). Men are mostly so in full-time jobs, while a substantial fraction of women are working in part-time jobs. The households composing the sample have on average slightly less than 2 children. Among the households composing the sample, 14.3% include other adults than the two partners. More than one fourth of the households have very young children (under 3 y.o.), 30.5% have children between 3 and 6 years old and almost half of the sample has children between 6 and 12.¹⁶

To have a first idea of how the level of education of both parents might influence the time they spend with their children, the rest of their time allocations, as well as how much money they spend

¹⁴Such inconsistencies include individuals who end up with a negative time left, i.e. the time (constructed) that is supposed to be left to rest, sleep.

¹⁵Note that in some of the analyses performed in what follows, the number of observations might be lower than 267 depending on whether some observations have missing values for the variables included.

¹⁶Note that those categories could be overlapping for the same household.

Table 2: Time use and money spent on children and public goods per education groups

		Education type of the couple			
		Low-Low	Low-High	High-Low	High-High
Frequency of the group		0.338 (0.030)	0.220 (0.027)	0.131 (0.022)	0.311 (0.030)
Variable		(1)	(2)	(3)	(4)
Paid work and commuting	By men	39.874 (2.557)	51.236 (2.187)	46.650 (2.375)	50.772 (1.328)
	By women	22.193 (2.146)	37.653 (2.638)	26.724 (3.596)	40.121 (1.667)
Housekeeping	By men	7.053 (0.657)	7.156 (1.057)	5.835 (1.022)	8.525 (0.701)
	By women	22.323 (1.521)	15.490 (1.423)	17.468 (2.288)	14.428 (0.918)
Childcare	By men	9.169 (0.881)	8.858 (0.974)	9.583 (1.599)	12.782 (1.312)
	By women	13.928 (1.228)	16.798 (1.777)	17.648 (2.570)	16.703 (1.261)
Leisure	By men	14.140 (1.146)	15.510 (2.006)	15.439 (1.721)	15.792 (0.926)
	By women	14.320 (1.459)	15.006 (1.411)	16.298 (2.352)	12.004 (0.685)
Money spent on children		368.205 (30.564)	360.937 (28.938)	323.313 (34.045)	462.707 (34.241)
Money spent on public goods		1363.315 (60.483)	1794.770 (78.013)	1782.316 (90.874)	2331.487 (97.923)

Note: N=267. Standard errors are in brackets. The table shows the average time spend per week for each of the variables for men and women in couples with different education types.

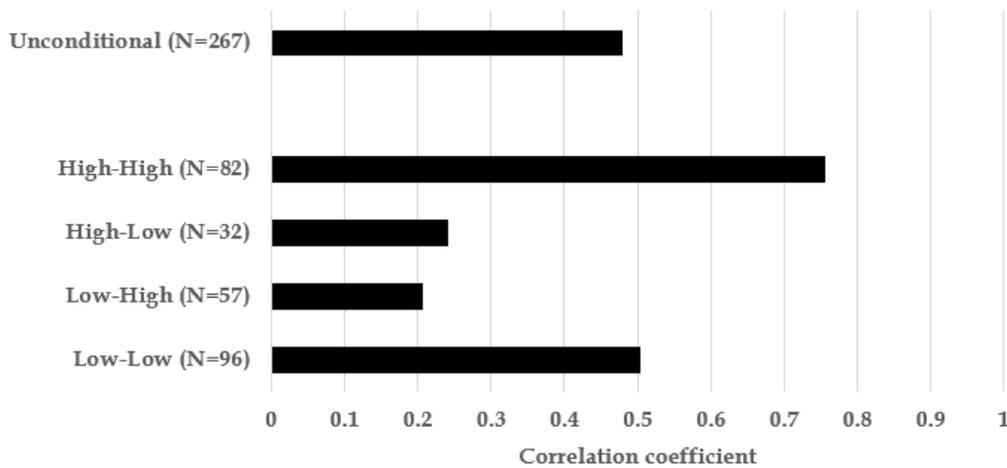
on their children and public goods, we first simply compute averages of those variables for men and women in the different groups of couples defined by the combination of the levels of education of both partners as explained in Section 3. Table 2 reports the mean time allocations for men and women in these different groups as well as the frequency of these groups. We can see, from the table, that there seems to be one third of the households in our sample in which both the man and the woman have a low level of education, around one third in which they both have a high level of education, while the last third is composed of households in which partners have different levels of education (with the majority of those being composed of households in which the woman is more educated than her partner).

Further looking at Table 2, it already appears that parents in high-high couples invest more in their children than the ones in low-low couples both in terms of time and money. Indeed, parents who both have a high level of education are found to, collectively, spend more time with their children than parents with a lower level of education (more than 6 hours per week in total). The table also shows us that, although there seems to be some improvement with education, the division of the work activities is still quite gendered, as we see that men are more active in paid work and women in unpaid work. Concerning the money spent on children, we can see from Table

2 that parents with a high level of education spend, on average, almost 100€ more per month on their children than parents with a low level of education. This is substantial as it represents more than 25% of the unconditional average spending on children by the households in the sample. This is in line with the results for the money spent on public good as it appears that high-high couples spend almost 1000€ more on it than low-low ones.

The observation that children in families with highly educated parents benefit, on average, from more investments both in terms of parental time and money is true as well over the distribution of the individuals in the different groups. Figures A.1 and A.2 in the Appendix plot the Generalized Lorenz curves of childcare time (by men and women) per education groups and of money spent on children and public goods per education group respectively. We can see that, in every cases, the curve for the high-high group lies above the one for the low-low group, meaning that children in the former group benefit from more investments (in time and money) than the ones in the latter group, and this, over the whole distribution.

Figure 1: Correlation of the time spent at childcare by men and women in the different couples



Note: This figure shows the correlation of the time spent taking care of the children by both partners in the different types of couples. The types of couples are defined as the level of education of: Man-Woman.

Finally, Figure 1 shows the correlation of the time spent taking care of the children by both partners in the different types of couples. We first see from this figure that there is some correlation between the partner's time spent at childcare as the unconditional correlation amounts to almost 0.5. The correlation, then appears to be the highest (and quite high) when both partners have a high level of education. This together with the observation made above from Table 2 supports the idea put forward in Altintas (2016) that the discrepancies in child development between children with higher-educated and less-educated parents is likely to be magnified by the fact that the former enjoy more investments by both parents in terms of time and money.

While this is already interesting, it is only descriptive and does not take into account potential confounding factors. We will, therefore, try to address that issue in Section 4 as we will perform a regression analysis.

4 Regression analyses

In this section we try to analyze the time spent at childcare by both parents and the factors determining it, with a focus on education. In particular, we first look at the combination of the educational levels of mothers and father. This should allow us to see if children in families with highly educated parents benefit from more investments both in terms of money and parental time. We then look at the educational level of the grandparents and the link it can have on the time spent at childcare by the parents. This would allow us to see if there is some transmission in the behaviors of parents.

We do so by taking into account the time spent in other activities by the individual and his/her partner. Accounting for this is crucial as time is a limited resource for individuals and as the time allocations of partners influence each other. It should further allow seeing whether there is some substitutability between the various activities as well as the potential correlations in time use of partners. Nonetheless, one cannot simply include the time spent at paid work or the time spent at childcare by the partner as a regressor as this would lead to endogeneity problems.

To solve that issue, and following what is done in previous studies ([Gimenez-Nadal and Molina, 2013](#); [Kimmel and Connelly, 2007](#); [Kalenkoski et al., 2009](#)), we decided to perform Seemingly Unrelated Regressions (SUR). We therefore consider a system of equations in which, for both partners, the different work activities (paid work, domestic work, and childcare) as well as the time both partners devote to leisure, and the amount of money that is spent by the household on their children are expressed as functions of both individuals' and households' characteristics. All these equations are then simultaneously estimated while allowing the error terms of each equation to be correlated, and estimating the full variance-covariance matrix of the residuals. The estimation of this matrix then allows us to see how the different time allocations are correlated for the individuals and with the time allocations of their partner.

Given the non-negative nature of time use variables, researchers have discussed the appropriate estimation model to use ([Foster and Kalenkoski, 2013](#)). In order to address the significant censoring (i.e. large numbers of zeroes) typically found in time-use data, many studies have used maximum likelihood estimation of a Tobit model. The use of a Tobit model supposes that the zeroes observed result from non-participation in the activity measured. However, this assumption has been questioned given that most of the previous studies rely on time diaries as a way to measure the time spent at childcare. As explained in [Section 2](#), the fact that time diaries are often recorded during a single day while the period of interest is often much longer could then lead one to interpret the zeroes observed as a measurement problem rather than proper non-participation. In that case, as argued by [Stewart \(2013\)](#), OLS would then be more appropriate than Tobit.

In this study, as explained in [Section 3](#), the time allocations of individuals were measured by stylized questions. We are therefore not likely to suffer from this mis-measurement issue. However, we still observe fractions of zeroes in the recorded activities that are not insignificant.¹⁷ Given this

¹⁷Table [A.2](#) in the Appendix reports the fraction of zeroes observed for each activities by men and women separately. We can see that this fraction is around 5% for most activities, except for domestic work by women, for

observation, we perform maximum likelihood estimations of Tobit models in what follows.¹⁸

The statistical model estimated therefore relies on the following equations:

$$T_{tmi} = \begin{cases} T_{tmi}^* & \text{if } T_{tmi}^* > 0 \\ 0 & \text{if } T_{tmi}^* \leq 0 \end{cases} \quad \text{where } T_{tmi}^* = \alpha_0 + \alpha_1 Educ_i + \alpha_2 X_m + \alpha_3 H_i + \varepsilon_{tmi}, \quad \varepsilon_{tmi} \sim N(0, \sigma^2) \quad (1)$$

$$T_{tfi} = \begin{cases} T_{tfi}^* & \text{if } T_{tfi}^* > 0 \\ 0 & \text{if } T_{tfi}^* \leq 0 \end{cases} \quad \text{where } T_{tfi}^* = \beta_0 + \beta_1 Educ_i + \beta_2 X_f + \beta_3 H_i + \varepsilon_{tfi}, \quad \varepsilon_{tfi} \sim N(0, \sigma^2) \quad (2)$$

$$\log(MCh_i) = \gamma_0 + \gamma_1 Educ_i + \gamma_2 X_m + \gamma_3 H_i + \nu_i, \quad \nu_i \sim N(0, \sigma^2) \quad (3)$$

Where T_{tmi} represents the time spent in activity t by the man (m) in household i , and T_{tfi} the time spent in activity t by the woman (f) in household i . The activities considered are *Childcare* (C), *Paid work* (P), *Domestic work* (D), and *Leisure* (L). T_{tmi}^* (T_{tfi}^*) is the so-called latent variable that linearly depends on: $Educ_i$ the variable of interest to this study (i.e. the educational level of parents, in a first time, and grandparents, in a second time), X_m (X_f), a vector containing characteristics of the man (woman), and H_i a vector containing household's characteristics. These control variables and the interest in including them were discussed in Section 3. MCh_i measures the total average monthly spending on children at the household level and is expressed as log-linearly depending on $Educ_i$, X_m , and H_i .¹⁹

The model is therefore composed of 9 equations, all estimated simultaneously: 4 of the type of Equation (1) (one for each of the four activities), 4 of the type of Equation (2) and Equation (3).²⁰ In the spirit of Seemingly Unrelated Regressions, we allow the error terms to be jointly distributed, without any restrictions on the correlation, to consider the possibility of correlation in the unobserved determinants of our dependent variables. This essentially recognizes the possibility that the time spent in each activity is correlated with: the time spent in another activity (as total time is finite), the time allocations of the partner (i.e. intra-household interdependencies), as well as the money spent on children (especially for childcare). We further assume that the error terms are independent across households.

The vector of the error components $\left(\varepsilon_{Cm} \quad \varepsilon_{Cf} \quad \varepsilon_{Pm} \quad \varepsilon_{Pf} \quad \varepsilon_{Dm} \quad \varepsilon_{Df} \quad \varepsilon_{Lm} \quad \varepsilon_{Lf} \quad \nu \right)'$ therefore follows a normal joint distribution $N(\mathbf{0}, \mathbf{V})$ where \mathbf{V} is the variance-covariance matrix of the residuals, estimated as well. It corresponds to:

which it is quite low, and paid work by women, for which it is quite high.

¹⁸We have as well estimated the effect with Seemingly Unrelated Regressions performed as OLS and the results are similar to the ones presented here. This is in line with what was found by Foster and Kalenkoski (2013) and Gimenez-Nadal and Molina (2013).

¹⁹We do the same with the characteristics of the mother (X_f) and the results are similar.

²⁰The equations are estimated with the help of the *cmp* command in STATA.

$$\mathbf{V} = \begin{pmatrix} \sigma_{Cm}^2 & \rho_{CmCf}\sigma_{Cm}\sigma_{Cf} & \rho_{CmPm}\sigma_{Cm}\sigma_{Pm} & \rho_{CmPf}\sigma_{Cm}\sigma_{Pf} & \dots & \rho_{CmLf}\sigma_{Cm}\sigma_{Lf} & \rho_{Cm\nu}\sigma_{Cm}\sigma_{\nu} \\ \rho_{CfCm}\sigma_{Cf}\sigma_{Cm} & \sigma_{Cf}^2 & \rho_{CfPm}\sigma_{Cf}\sigma_{Pm} & \rho_{CfPf}\sigma_{Cf}\sigma_{Pf} & \dots & \rho_{CfLf}\sigma_{Cf}\sigma_{Lf} & \rho_{Cf\nu}\sigma_{Cf}\sigma_{\nu} \\ \rho_{PmCm}\sigma_{Pm}\sigma_{Cm} & \rho_{PmCf}\sigma_{Pm}\sigma_{Cf} & \sigma_{Pm}^2 & \rho_{PmPf}\sigma_{Pm}\sigma_{Pf} & \dots & \rho_{PmLf}\sigma_{Pm}\sigma_{Lf} & \rho_{Pm\nu}\sigma_{Pm}\sigma_{\nu} \\ \rho_{PfCm}\sigma_{Pf}\sigma_{Cm} & \rho_{PfCf}\sigma_{Pf}\sigma_{Cf} & \rho_{PfPm}\sigma_{Pf}\sigma_{Pm} & \sigma_{Pf}^2 & \dots & \rho_{PfLf}\sigma_{Pf}\sigma_{Lf} & \rho_{Pf\nu}\sigma_{Pf}\sigma_{\nu} \\ \rho_{DmCm}\sigma_{Dm}\sigma_{Cm} & \rho_{DmCf}\sigma_{Dm}\sigma_{Cf} & \rho_{DmPm}\sigma_{Dm}\sigma_{Pm} & \rho_{DmPf}\sigma_{Dm}\sigma_{Pf} & \dots & \rho_{DmLf}\sigma_{Dm}\sigma_{Lf} & \rho_{Dm\nu}\sigma_{Dm}\sigma_{\nu} \\ \rho_{DfCm}\sigma_{Df}\sigma_{Cm} & \rho_{DfCf}\sigma_{Df}\sigma_{Cf} & \rho_{DfPm}\sigma_{Df}\sigma_{Pm} & \rho_{DfPf}\sigma_{Df}\sigma_{Pf} & \dots & \rho_{DfLf}\sigma_{Df}\sigma_{Lf} & \rho_{Df\nu}\sigma_{Df}\sigma_{\nu} \\ \rho_{LmCm}\sigma_{Lm}\sigma_{Cm} & \rho_{LmCf}\sigma_{Lm}\sigma_{Cm} & \rho_{LmPm}\sigma_{Lm}\sigma_{Pm} & \rho_{LmPf}\sigma_{Lm}\sigma_{Pf} & \dots & \rho_{LmLf}\sigma_{Lm}\sigma_{Lf} & \rho_{Lm\nu}\sigma_{Lm}\sigma_{\nu} \\ \rho_{LfCm}\sigma_{Lf}\sigma_{Cm} & \rho_{LfCf}\sigma_{Lf}\sigma_{Cf} & \rho_{LfPm}\sigma_{Lf}\sigma_{Pm} & \rho_{LfPf}\sigma_{Lf}\sigma_{Pf} & \dots & \sigma_{Lf}^2 & \rho_{Lf\nu}\sigma_{Lf}\sigma_{\nu} \\ \rho_{\nu Cm}\sigma_{\nu}\sigma_{Cm} & \rho_{\nu Cf}\sigma_{\nu}\sigma_{Cf} & \rho_{\nu Pm}\sigma_{\nu}\sigma_{Pm} & \rho_{\nu Pf}\sigma_{\nu}\sigma_{Pf} & \dots & \rho_{\nu Lf}\sigma_{\nu}\sigma_{Lf} & \sigma_{\nu}^2 \end{pmatrix}$$

4.1 Looking at the parents' education: differing investments in children?

Table 3 presents the results when the system of equations presented above is estimated and when we use the combination of the educational level of both partners as defined in Section 3. Note that this table reports the marginal effects on the uncensored latent variable. The same will be done for the following tables reporting estimation results. We will, nonetheless, report as well, when analyzing the tables in the text, the average marginal effects (AME) obtained for the observed outcome.

Several findings emerge from this table. We can first see that, as was hinted by the descriptive statistics, couples in which both partners have a high level of education spend significantly more time and money on their children. In terms of time, fathers are found to spend 2.9 (AME of 2.07) hours more on their children per week. This is substantial as it represent more than 20% of the average time spent at childcare by fathers in the sample.²¹ We further see that the coefficients for the other types of couples for childcare by the father are negative and not significant. Fathers with a high level of education are therefore found to spend more time with their children only when their wives have a high level of education as well.²² We further observe that the larger amount of time spent at childcare by the fathers in high-high couples does not come with a reduction of the time spent at childcare by the women in the couple. Indeed, we find, for women, a positive coefficient for every education type "above" Low-Low. Although the coefficients are not significant, the lowest p-values are found when the woman is highly educated (0.112 for low-high couples and 0.14 for high-high ones). Therefore, we could consider that high-high couples spend even more time on their children if we sum up the coefficients found for men and women, and up to 5.21 (3.79 for AME) hours more than low-low couples. This is confirmed when we pool together the time spend by both parents at childcare and run the same regressions. We indeed find that high-high couples spend 4.74 (AME of 3.81) hours more per week on their children than low-low ones. Those

²¹The unconditional average time spent at childcare by fathers in the sample amounts to 10.3 hours per week

²²We also performed the same exercise but including the levels of education of each partners separately (i.e. without interacting them). It appears that only the education of the fathers matters for the time they spend at childcare, and that it is positively correlated to it. We, however, see here that there is an interest in looking at the combinations of the levels of education of both partners instead of the education of each partner separately, as fathers with a high level of education are found to spend more time taking of their children only when their wives are highly educated as well. The results for the education of each partners introduced separately are available upon request.

Table 3: Tobit SUR estimates on the time spent by partners in various activities and on the money spent on children

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type of the couple	Low-High	-1.111 (1.329)	3.133 (1.972)	11.051*** (3.462)	15.150*** (3.956)	-0.863 (1.411)	-7.253*** (1.838)	2.003 (2.405)	0.828 (1.925)	0.182 (0.136)
(Man-Woman - OC: Low-Low)	High-Low	-0.070 (1.672)	2.423 (2.350)	6.561* (3.849)	4.132 (5.043)	-1.637 (1.581)	-4.562* (2.337)	1.353 (2.181)	1.988 (2.485)	0.039 (0.130)
	High-High	2.893** (1.352)	2.317 (1.569)	11.166*** (3.169)	21.536*** (3.885)	1.393 (0.999)	-8.964*** (1.658)	3.008* (1.611)	-1.358 (1.703)	0.338*** (0.104)
Age		0.002 (0.706)	-0.208 (0.909)	3.957* (2.110)	1.508 (2.545)	-0.385 (0.546)	-0.963 (1.136)	-0.983 (1.219)	-2.991** (1.295)	0.034 (0.056)
Age squared		-0.003 (0.008)	-0.002 (0.011)	-0.045* (0.025)	-0.020 (0.033)	0.004 (0.007)	0.014 (0.015)	0.014 (0.015)	0.040** (0.017)	-0.000 (0.001)
Log (Household non-labor income)		0.157 (0.492)	0.351 (0.648)	-5.373*** (1.413)	-2.115 (1.311)	-0.194 (0.510)	-0.833 (0.603)	-0.045 (0.595)	0.253 (0.666)	0.065 (0.081)
Other adults in Household		-3.126** (1.547)	-3.944** (1.680)	4.841 (4.036)	3.831 (4.556)	-0.920 (1.611)	2.456 (2.678)	0.073 (2.368)	-1.961 (2.790)	-0.200 (0.146)
Number of children in Household		-1.472*** (0.510)	-1.105 (0.796)	3.282* (1.703)	-6.151*** (2.124)	0.664 (0.531)	5.159*** (1.065)	-0.180 (0.881)	0.114 (0.925)	0.260*** (0.054)
Children under 3		2.252 (1.686)	7.303*** (2.011)	1.332 (3.917)	-0.776 (4.648)	-0.590 (1.093)	0.539 (1.850)	0.820 (1.820)	-3.084 (1.974)	-0.114 (0.100)
Children between 3 and 6		7.671*** (1.484)	6.103*** (1.780)	-0.230 (2.691)	3.893 (3.048)	-1.602* (0.966)	-2.618* (1.442)	-1.246 (1.536)	-2.982* (1.576)	-0.133 (0.095)
Children between 6 and 12		1.683 (1.195)	1.760 (1.516)	1.145 (3.031)	3.698 (3.974)	0.474 (1.006)	-0.925 (1.891)	1.409 (1.612)	0.638 (1.869)	-0.120 (0.095)
Father's health (OC: Good health)	High	-0.349 (1.171)	0.112 (1.438)	0.210 (2.355)	2.849 (3.074)	-0.738 (1.003)	-0.168 (1.374)	-2.121 (1.489)	-0.086 (1.426)	0.016 (0.085)
	Low	-2.084 (1.625)	-0.318 (2.234)	-4.902 (5.512)	-5.789 (5.067)	-0.487 (1.404)	0.596 (2.369)	0.860 (3.138)	2.266 (2.887)	-0.239 (0.192)
Mother's health (OC: Good health)	High	1.301 (1.180)	-2.905* (1.565)	0.855 (2.403)	4.851 (3.178)	-0.205 (0.954)	0.701 (1.510)	-3.160** (1.583)	-1.226 (1.522)	-0.059 (0.083)
	Low	0.897 (1.491)	-3.335 (2.931)	0.337 (4.755)	-0.476 (5.612)	-2.920* (1.504)	-3.844* (2.233)	-0.801 (2.585)	-1.087 (2.721)	-0.073 (0.128)
Region (OC: Brussels)	Flanders	2.057 (1.270)	2.062 (2.121)	7.793* (4.597)	9.502* (5.414)	2.962** (1.231)	7.840*** (1.899)	0.859 (3.366)	1.375 (2.463)	-0.069 (0.113)
	Wallonia	3.220** (1.538)	4.665* (2.407)	1.701 (4.786)	3.924 (5.903)	0.010 (1.306)	3.458* (1.923)	2.975 (3.605)	5.598* (2.888)	-0.128 (0.128)
Constant		9.727 (14.854)	19.342 (18.893)	-26.140 (43.643)	0.951 (49.437)	14.575 (11.454)	27.999 (22.122)	31.066 (24.535)	65.206*** (24.139)	4.232*** (1.115)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regressions to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is displayed in Table 4.

results can be found in Table A.3 in the Appendix.

In terms of money, high-high couples are found to spend a significantly larger amount on their children as well. In particular, we find a coefficient of 0.338 meaning that they spend 40.21% more on their children per month than the couples in which both parents have a low level of education, a fraction that is substantial.²³ This finding is also true when we consider the money spent on public goods in general by the household as a dependent variable instead of the money spent on children. We find a coefficient for high-high couples of 0.536 corresponding to a spending 70.91% larger on public goods than low-low ones. Those results can be found in Table A.4 in the Appendix.

Taken together, those results are quite substantial, as children in families with highly educated parents enjoy, at least, 2.9 (AME 2.07) hours more per week of parental time than children with parents with a low educational level, as well as more than 150€ more per month that are spent for them.²⁴

Regarding the time spent by the parents in other activities according to their education types, the larger amount of time spent at childcare observed for high-high couples does not seem to come from a reduction in the time devoted to paid work neither for men nor for women.²⁵ The only reduction observed is a reduction of domestic chores for the women, especially when they have a high level of education. Overall, education appears to lead to a more gender-balanced division of the activities (although to a limited extent as could be seen in the descriptive statistics in Table 2).

Looking at the rest of the control variables, we find results that are in line with previous studies. Having young children appears to be associated with an increase in mothers' childcare by a substantial number of hours. While men seem to step in for children between 3 and 6. The presence of other adults in the household reduces substantially the time spent by both parents at childcare. While having more children seems to lead towards a more gendered division of the activities, as we observe that men spend less time at childcare and more time at paid work, while women spend less time at paid work and more time doing domestic chores. Finally, the couples living in Wallonia appear to spend more time taking care of their children (than the ones living in Brussels), while the ones living in Flanders spend more time in paid and domestic work.

As stated above, when estimating our model as a set of seemingly unrelated regressions we allow for the possibility of correlation in the unobserved determinants of our dependent variables, and estimate these correlations. In a sense, we allow for the possibility that each of our dependent variables is affected by the other ones. It is therefore interesting to see how those variables could be related to each other, to see the degree of substitutability between the various activities as well as the potential correlation in the time allocations of the partners (especially in terms of childcare). Table 4 displays the correlation matrix of residuals obtained when estimating the model.

We can see from Table 4, that the time spent at childcare by both partners is highly correlated

²³This is true as well if we consider the money spend per children in the households, as we find a very similar coefficient of 0.303 corresponding to an effect of 35.39%. Those results are presented in Section 4.2.

²⁴Given that the unconditional mean spending of households in the sample on their children is of 392.14€ .

²⁵Note that for women the time spent at paid work appears to increase mostly with their own educational level. Although the increase is the highest when their partner also has a high level of education.

Table 4: Correlation matrix of residuals from the model presented in Table 3

		Childcare		Paid		Domestic		Leisure		log(Money spent on children)
		Father	Mother	Father	Mother	Father	Mother	Father	Mother	
Childcare	Father	1								
	Mother	0.333*** (0.075)	1							
Paid work	Father	-0.190*** (0.067)	0.151** (0.070)	1						
	Mother	0.023 (0.067)	-0.112 (0.075)	0.118 (0.076)	1					
Domestic work	Father	0.098 (0.073)	-0.095* (0.056)	-0.214*** (0.065)	0.119** (0.058)	1				
	Mother	-0.059 (0.062)	0.121** (0.059)	0.066 (0.071)	-0.511*** (0.071)	-0.099 (0.067)	1			
Leisure	Father	0.113** (0.057)	0.184*** (0.071)	-0.194*** (0.068)	0.006 (0.070)	0.151** (0.061)	0.077 (0.070)	1		
	Mother	0.037 (0.052)	0.066 (0.069)	0.059 (0.072)	-0.188*** (0.073)	0.117** (0.055)	0.110 (0.068)	0.385*** (0.075)	1	
log(Money spent on children)		0.086 (0.079)	0.142* (0.076)	0.147** (0.067)	0.146** (0.060)	0.171** (0.069)	-0.045 (0.074)	0.105* (0.061)	-0.020 (0.063)	1

Note: Correlation matrix of residuals. In particular, the table shows the arc-hyperbolic tangents of the ρ 's obtained from the SUR system exposed in Table 3. Sample includes all individuals living in a couple (married or cohabiting) with at least one child under the age of 18. Survey weights are used.

(the same is true for leisure). This could be interpreted as supporting the idea that childcare by mother and father can be considered as complementary rather than substitute (Chiappori et al., 2017; Del Boca et al., 2014; Hallberg and Klevmarken, 2003). Or, at least, it does not go against this idea.²⁶ In terms of substitutions between the various activities, we see that childcare by the fathers appears to come with a reduction of the time they spend at paid work. We further see that fathers' time spent in paid work seems to be linked with the fact that childcare in the household is more performed by the mothers, as it is negatively correlated with own childcare and positively so with the mothers' childcare. The inverse, for time spent in paid work by women, is not true (or at least not significant). For both gender, it appears that domestic and paid work are negatively correlated, with the correlation being higher, in absolute value, for women. This could be seen as pointing towards situations in which women end up choosing between being housewives or working wives. Finally, we can see that leisure and paid work are negatively correlated for both gender.²⁷

4.2 Discussion and sensitivity of the results

In this section we try to discuss the results obtained with regards to the theoretical literature exposed in section 2, as well as discuss their potential sensitivity.

In terms of the sensitivity of our results, we have already stated that we obtain similar results when we control for the age of the women in the couples for the regression concerned with the money spent on children rather than the age of the men, and when we perform Ordinary Least Squares Seemingly Unrelated Regressions (OLS SUR) instead of Tobit.²⁸ We have as well tested the sensitivity of our results to the inclusion/exclusion of the controls that we use and find that our results are quite robust.²⁹ Our results appear to be robust as well to the inclusion of the big five personality traits, measures that allow controlling for usually unobserved characteristics.³⁰ Finally, we find similar results when we consider the time and money spend by the household per children (i.e. adjusting for the number of children in the household). As can be seen from Table A.5 in the Appendix, both fathers and mothers of high-high couples are found to spend significantly more

²⁶The results here do not immediately mean that fathers and mothers are complementary at producing children's human capital as each individual's time spent on childcare represents an input and not an output. However, the high correlation found does certainly not reject complementarity. Furthermore, if one makes the assumption that each individual produces a different part of the children's human capital through a one-input technology with constant returns-to-scale; the individual's input value can then serve as the output value (see Cherchye et al., 2020, for a discussion). In our case, one could argue that partners are complementary at raising their children as they specialize in different dimensions needed by the children (e.g. mathematics vs. linguistics, soft vs. hard skills,), something that would then be confirmed by our results.

²⁷This is not so surprising and somehow shows that the standard neoclassical theory of labor supply was not completely wrong when considering that each hour spent by the individuals at paid work was an hour not spent at leisure. Note, however, that our results do not say anything about the sometimes questioned direct disutility of paid work assumed in that theory.

²⁸All those results are available upon request.

²⁹We do so by including, first, only the education type and the age (and its square) of the individuals while then including the other controls one by one. In a second time, we take our baseline specification with full controls and remove each control separately and see if our main results change.

³⁰The measures of the big five personality traits are constructed with questions drawn from the Ten-Item Personality Inventory (TIPI) proposed by Gosling et al. (2003) that the MEqIn database has the advantage of containing. While controlling for personality traits has mainly been shown as being of importance in analyses of the subjective well-being (see for instance: Boyce, 2010; De Rock and Perilleux, 2021). One could, nonetheless, easily argue that they can also impact the time allocation mixes of individuals. We therefore decided to test our results to the inclusion of these characteristics to reinforce the confidence we have in them. The results from this analysis are available upon request.

time per children: 1.95 (AME 1.23) hours for fathers, and 1.86 (AME 1.21) for mothers. While the high-high couples are still found to spend around 35% more on their children than the low-low ones.

Overall, it appears that our results are quite robust to changes in the specification of the model estimated as well as in the technique used to estimate it. In particular, our main result that children whose parents are both highly educated benefit from more investments both in terms of time and money than children with parents with a low level of education hold in every specifications. This supports the idea put forward by [Altintas \(2016\)](#); [Chiappori et al. \(2017\)](#), and [Dotti Sani and Treas \(2016\)](#) that children born in families with lower socio-economic statuses end up suffering from a dual disadvantage. This could help explain part of the growing discrepancies observed between children with a high socio-economic background and those with a low one.

Concerning the investment in parental time, it is especially true if one considers that highly educated parents are better at producing the human capital of their children, as is done in [Chiappori et al. \(2017\)](#).³¹ This idea is somehow supported by [Ramey and Ramey \(2010\)](#) who put forward that one major cause for the observed increase in the time spent by parents on childcare since the mid-1990s is a higher competition for college admissions. It is further supported by the findings of [Gimenez-Nadal and Molina \(2013\)](#), who find that the effect of parents' education on the time spent taking care of children occurs for a particular type of childcare: educational childcare.

Finally, [Sigle-Rushton \(2010\)](#) shows that fathers' involvement in home production stabilizes marriage regardless of mothers' employment statuses. As divorce has been shown to be detrimental in most cases for children (see [Raley and Sweeney, 2020](#), for a review), this could reinforce our findings as children in high-high families would then benefit from more investments in terms of time and money, while being likely to live in families facing a lower probability of divorce.

Regarding the investment in terms of money spent on children, the results are not so surprising and could be linked to the fact that high-high couples are likely to have a larger income than low-low ones. This is actually the case in our sample as can be observed from [Figure A.3](#) in the Appendix. However, following what was done in previous studies such as [Gimenez-Nadal and Molina \(2013\)](#) we decided not to control for income in the previous exercise and rather to control for non-labor income. This comes mainly from the endogeneity issue that income might induce with time variables and in particular with the time spent at paid work. To see, however, the potential effect that income could have on our results we test different ways of taking it into account.

First, we simply replace the non-labor income by the total disposable income (only) in the regression with the money spent on children as a dependent variable. The *cmp* command indeed allows to include different controls for the different equations composing our model. The results of those regressions can be found in [Table A.6](#) in the Appendix. The results are very similar to the previous ones as we find almost the same coefficient for the time spent at childcare by fathers in high-high couples and a slightly lower coefficient, but still significant, for the money spent on children by high-high couples. In particular, even when controlling for total disposable income,

³¹One could simply think of highly educated parents being more at ease when having to help their children with homework.

we still find that highly educated couples spend 28.9% more on their children than low-low ones. Surprisingly, we do not find any direct effect of household total income on the money spend on children.³²

We then try to take into account the income of the household by considering the share of household income spent on their children as a dependent variable in the last equation (Equation (3)) instead of the logarithm of the absolute amount. The results for this exercise are presented in Table A.7 in the Appendix. We can still see that the results concerning the time spent at childcare are very close to the previous ones. Nonetheless, the results for the money spent on children, expressed in this case as the share of total income, are different. In particular, we observe that high-high couples spend 3.2 percentage points less of their income than low-low ones. The same is found for high-low couples who spend 3.6 percentage points less. While a negative coefficient is found for low-high couples, it is not significant.

Overall, on the one hand, it seems that trying to account for the income level of the household does not change (at all) the results obtained for the time spend at childcare, namely that fathers in high-high couples spend significantly more time with their children. On the other hand, however, accounting for total income appears to somehow mitigate the results found for the money spent on children, the most likely explanation being that high-high couples have larger income than low-low ones as could be observed in Figure A.3 in the Appendix. The initial result is, nevertheless, still of interest, as whether it comes from a larger income or not, children in high-high couples still benefit from a dual advantage.

Controlling for hourly wages is important in such an exercise, as wage has been considered since Becker (1965) to represent the opportunity cost of the time not devoted to paid work. We decided not to do so in our baseline exercise as we do not have a precise measure for the hourly wages of the individuals. We, however, decided to test whether our results were robust to the inclusion of a constructed measure of the wages of both partners. To construct this measure, we use the information in the MEqIn database on the monthly income from employment (and self-employment) of the individuals, as well as on the time they spend at paid work per week. We can therefore construct an hourly wage measure, for working individuals only, by dividing the monthly income by 4 and then by the amount of time spent on paid work per week. Following Gimenez-Nadal and Molina (2013), we then constructed the relative wage of partners by dividing women's wage by the wage of their partners (i.e. men's wage). As the relative wage has been used in the so-called collective model literature to estimate the sharing rule (see for instance Lise and Seitz, 2011), it could allow us to have an idea of the bargaining power of each partner within the couple. When looking at the distribution of the constructed relative wage, it appears that its mean is of 1.68 and its median at 0.98, while the average gender wage gap for Belgium was estimated at 6% in 2016 (Statbel, 2021). This led us not to trust too much in this constructed wage variable and to include it in the analysis only as a robustness test.

³²This could, however, be linked to a collinearity of the variable defining the types of couples according to their educational levels and income, as we have seen in Figure A.3 in the Appendix that highly educated couples have larger income.

Tables [A.8](#) and [A.9](#) in the Appendix report the results when the constructed relative wage, and the individuals' wage are introduced respectively. Note that, since to have the relative wage, both partners have to be employed, the sample is reduced by a large amount for [Table A.8](#). For this reason, we decided as well to perform the analysis including only the wage of the individuals. We can see from both tables that controlling for the wage level (of the individual or relative) does not change the result found before for the time spent at childcare as we still observe that men in high-high couples spend more time on it. Concerning the results for the amount of money spent on children, we can see that the coefficient for high-high couples is no longer significant when we control for the relative wage while it still is when we control for the individuals' wage.³³

Finally, based on the fact that paid work seems to be negatively correlated with the time spent at childcare, and significantly so for men, we decided to deepen the investigation on the potential impact of time spent at paid work on childcare. Indeed, if one's goal is to increase the time spent at childcare, and especially that of fathers, the result above would suggest reducing the time spent at paid work. Based on that premise, we perform additional analysis in which we include the labor market status of the individuals as a regressor and remove the two equations with time spent at paid work as a dependent variable to avoid endogeneity. The results from this analysis can be found in [Table A.10](#) in the Appendix. We can see that working part-time increases the time spent by both men and women on their children but that the increase is larger for men. The increase for men is indeed quite large as it amounts to almost 4 (AME 2.87) hours more per week. This is in line with [Hallberg and Klevmarken \(2003\)](#), who find that a change in the father's working hours has more influence on both parents' time spent at childcare than a change in the mother's working hour. We further see that working part-time increases the time spent by men and women at housework. While the coefficient is not significant for men, it still has a p-value of 0.19, and is positive and quite large: almost 3 (AME 2.1) hours more par week. Those results are in line with the recommendations of [Gornick and Meyers \(2003\)](#) who suggest, among other things, that a reduction in working hours as well as a protection of part-time workers can be seen as a way of ensuring that more time is distributed to the family, as well as helping in achieving a more equal division of paid and unpaid work between genders.

In regards with the theories exposed in [Section 2](#), our results seem to support the gender ideology one. In particular, it appears that specialization could explain only what is observed for couples in which the man is highly educated and the woman not. And still, in this case, the conservative version of the gender ideology theory is in line with the findings as well. It further appears that we seem to go from the conservative version of the gender ideology theory for low-low couples to the egalitarian version for high-high couples. Put otherwise, education seems to lead to a more egalitarian division of the activities within couples. We further see that highly educated women are more active in paid labor and that it does not seem to be compensated by a reduction of the time

³³Note that for this last equation with the log of the money spent on children as an outcome, we controlled for the wage of the man in the couple. We, however, did the same exercise controlling for women's wage in the last equation and found that the coefficient for high-high couples was no longer significant in this case. We, however, do not want to draw too much from this result as there are more missing values for the wages of women than for men. The change in significance could then be due to a change in the sample rather than a mediation effect.

they spend with their children (even when their partner spends more time at childcare), but rather by a reduction in the time they spend doing domestic chores. While [Chiappori et al. \(2017\)](#) and in particular [Greenwood et al. \(2005\)](#) posit that this comes from technological progresses freeing up time used before for doing domestic chores,³⁴ we believe that it is unlikely to be the only factor here and that it is more likely that highly educated individuals outsource their domestic chores, as it has been shown that the majority of the users of the Service Vouchers in Belgium are highly educated ([Goffin et al., 2018](#)). This outsourcing often results in hiring women with a low level of education ([Goffin et al., 2018](#); [Leduc and Tojerow, 2020](#)).

4.3 Looking at the grandparents' education: Transmission?

To further investigate on the question of gender ideology, and, in particular, on whether having a higher education is associated with a change of mentalities, especially for men, we look at the educational level of the grandparents and the effect it has on the time spent at childcare by the parents.³⁵ This also gives us an idea on whether there is some transmission in the behaviors of individuals and, therefore, on whether the change of mentality that education seems to induce would persist across generations. To do so, we replace the education variable defining groups of couples by two variables stating whether the mother and father of the individuals had a high educational level or not and how this impacts the time spent at childcare by the individual. In particular, in Equation (1) we replace the variable $Educ_i$ by two variables measuring the educational level of the paternal grandparents (grandfather and grandmother), in Equation (2) $Educ_i$ is replaced by two variables measuring the educational level of the maternal grandparents, and in Equation (3), the variable $Educ_i$ is replaced by 4 variables measuring the educational level of the paternal and maternal grandparents.³⁶ For the grandparents, we define an individual as having a high education if he/she completed upper secondary education or more.³⁷ The rest of the model is the same as before.

Given that grand-parents' education is likely to be correlated to the one of parents, to make sure that we are not simply replicating the exercise performed in Section 4.1, we first simply computed the correlations of parents' and grandparents' education. We can see from [Table A.12](#) and [Table A.13](#) both in the Appendix that the correlation between grandparents' education (paternal and maternal respectively) and parents' education (father and mother respectively) are quite low.

[Table 5](#) reports the results of the estimation when the education of the grandparents is considered. We can see from the table that there indeed seems to be some transmission across the generations as we observe that when the paternal grandfather is highly educated, men end up spending more time taking care of their children. Indeed, we find that men whose father is highly

³⁴One could think of the commercialization of the dishwasher, or, more recently, of robot hovers.

³⁵To avoid confusion with the previous part we will refer to the parents of the individuals, who are parents themselves, as grandparents.

³⁶We did not look at the combination of the educational level of the grandparents as was done in Section 4.1 for the parents, to avoid having too many categories (i.e. dummy variables) for education in Equation (3). The interest of looking at the combination of the educational levels is less clear-cut as well when thinking about transmission.

³⁷We decided to set this lower threshold for grandparents having in mind that tertiary education was likely to be more occasional at the time. It further seems to divide our sample in comparable groups as can be seen from [Table A.11](#) in the Appendix.

Table 5: Tobit SUR estimates when grandparents' education is considered

	Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
	Men	Women	Men	Women	Men	Women	Men	Women	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Paternal grand-father's education = High	5.939*** (1.596)		-2.217 (3.177)		-0.748 (1.189)		-0.224 (1.471)		0.188* (0.113)
Paternal grand-mother's education = High	-2.396 (1.496)		4.874 (3.200)		1.786 (1.267)		0.281 (1.491)		0.014 (0.113)
Maternal grand-father's education = High		-0.091 (1.626)		3.678 (3.146)		-3.387** (1.380)		0.216 (1.522)	0.096 (0.086)
Maternal grand-mother's education = High		1.103 (1.655)		10.804*** (3.316)		-3.964*** (1.330)		-1.299 (1.614)	-0.019 (0.089)
Constant	21.463 (17.301)	14.405 (19.212)	-43.843 (44.603)	-23.465 (52.149)	8.866 (12.364)	38.079* (21.853)	24.568 (23.197)	49.963** (22.049)	4.026*** (1.077)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regressions to another. The total number of observations used for this model is 266. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is shown in Table A.14, in the Appendix. We control as well in each regressions for the age of the individuals, the logarithm of the household non-labor income, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables can be found in Table A.15, in the Appendix.

educated spend almost up to 6 hours (AME of 4 hours) more per week on childcare than the ones whose father has a low level of education. This again is substantial. For women, there seems to be some transmission as well as we see that women who have highly educated mothers spend more time in paid work and less time doing domestic chores. A lower amount of time spent doing domestic chores for women is also observed when the maternal grandfathers are highly educated. We further see that households whose paternal grandfather is highly educated tend to spend more money on their children by a sizable amount (more than 20% more).

We find very similar results when we include the money spent on public goods instead of the money spent on children. Indeed, the coefficients found for the time variables are almost virtually the same, as can be seen in Table A.16, in the Appendix. We further see that, for money spent on public goods, it is now the educational level of the grandmothers (both maternal and paternal) that seem to lead to higher spending.

Although we have shown that the educational level of parents and grandparents are not highly correlated, we decided to include only the grandparents' level of education (i.e. without the combination of education of both partners) in the baseline exercise for this Section. We, nonetheless, performed the exercise as well, while including both the combination of the educational level of the parents and the educational level of the paternal and/or maternal grandparents as was done in Table 5. The results from this exercise can be found in Table A.17 in the Appendix. We can see from this table that the results observed for grandparents above in Table 5 remain even when we control for the education of both parents. The only change is that the coefficient for paternal grandfather with a high education in the last column (the one with the log of money spent on children as outcome) is no longer significant (the p-value is 0.153). Concerning the combination of the educational level of both parents, we find as well similar results as in Section 4.1, except that the coefficient for childcare by the father for high-high couples is no longer significant, although its p-value is of 0.138. This could mean the larger amount of time spent by fathers in high-high couples on childcare found previously mainly comes from the fathers in these couples who have a highly educated father themselves.³⁸

Finally, in line with previous studies on transmission of gender norms such as Fernández et al. (2004) and Morrill and Morrill (2013), we include the educational level of both paternal and maternal grandparents to see if there might be some effect, for instance, of mothers-in-law on women's time allocations. Table A.18 in the Appendix reports the results of this exercise. The results observed in Table 5 are still present except for the money spent on children (the p-value is however the lowest for the education of the paternal grandfather and is equal to 0.129). We further see that the transmission of the effects seem to occur through the paternal grandparents for childcare and the maternal ones for paid work. Indeed, in addition to the results already observed in Table 5, we see that when the paternal grandmother is more educated, mothers spend more time at childcare, while when the maternal grandmother is more educated fathers spend more time on the paid labor market.

³⁸We, indeed, see in our sample that almost 80% of the fathers in high-high couples have a highly educated father themselves.

Those results are as well in line with the gender ideology theory, and even its egalitarian version, as it could be argued that highly educated grandmothers could have been more active on the paid labor market therefore setting up an example for their daughters who end up spending less time doing domestic chores and more time in paid work. While for the highly educated grandfathers, it could be argued, given our previous results, that they were more likely to spend more time with their children (an effect that could have been multiplied if we believe that parental time was also positively correlated at the time). Their sons therefore have a higher benchmark as an idea of the time parents should devote to their children and end up spending more time with their own children. Overall, parents seem to act as role models for their children (and especially for the ones with the same gender). In particular, for childcare, it seems to be the gender norms attitude of the father, transmitted by his parents, that has more impact on the time spent by both partners, while for paid work it is more the gender norm attitude of the mother.

This last result is also interesting from a policy perspective as it would mean that the changes in behaviors of the current generation, potentially obtained through a policy change, in terms of time spent at childcare by the fathers or time spent at work by the mothers, are likely to be transmitted across generations.

5 Conclusion

This study looks at the link between education and the time and money that parents spend on their children, allowing for the time spent in other activities to influence the time spent at childcare, and taking into account the potential intra-household interdependencies in time allocations. This is done by performing Seemingly Unrelated Regressions as was done in [Gimenez-Nadal and Molina \(2013\)](#), [Kimmel and Connelly \(2007\)](#), and [Kalenkoski et al. \(2009\)](#).

For education, we first consider the combination of the educational levels of men and women in couples, allowing us to see whether children in families that are less affluent might suffer from a “dual disadvantage”, as posited by [Altintas \(2016\)](#), as they suffer from less investment both in time and money. We then consider the impact that grandparents’ educational level might have on the parental investment in children, both in terms of time and money. This is, to the best of our knowledge new to this study, and it should allow to see whether there is some transmission of the effects found across generations.

We find that, while the division of time between men and women is still gendered, it seems to get more egalitarian when the individuals have a high level of education. Overall, our results seem to back up the gender ideology theory with education driving the transition from its conservative version to its egalitarian.

Childcare by both parents appears to be correlated. This does not go against previous results by [Hallberg and Klevmarken \(2003\)](#) and could therefore support the explicit modeling of parental childcare as complementary as is done in [Del Boca et al. \(2014\)](#), and [Chiappori et al. \(2017\)](#).

We find that children born in families with parents who both have a high educational level are

likely to be better off than children with parents with a low level of education as they benefit from more investments both in terms of time and money, with the extra time coming mainly from their father. This could explain part of the observed increased discrepancies between children with higher socio-economic background and the ones with lower socio-economic background ([Altintas, 2016](#)). These inequalities would be even exacerbated if we believe the predictions made by [Chiappori et al. \(2017\)](#) that having highly educated couples investing more in their children's human capital then leads to a reinforced assortative matching.

Concerning the other time allocations, we observe that women with a higher level of education spend more time in paid work and that this does not come with a reduction of the time they spend taking care of their children (on the contrary), but rather with a reduction of the time they spend doing housework, a task that, we believe, they are likely to outsource. We further see that a reduction of the time spent in paid work by men seems to lead to a more gender balanced division of the unpaid work (childcare and housework) within the households.

Finally, our results seem to be transmitted over generations as it appears that grandparents' education is linked with the time allocations of parents. In particular, grandparents seem to serve as gendered role models to parents when it comes to time allocations.

Given that our results do not go against a complementarity of the time spent at childcare by both parents, if one believes in said complementarity, a simple policy recommendation would be the implementation of paternity leaves of the same duration and nature as the maternity ones. This could even have long-lasting effects as paternity leaves have been proven to increase fathers' involvement in childcare and housework in the long-run ([Tamm, 2019](#)). Concerning the lower investments observed in children in low-low families, if one believes that low educated individuals are so by choice, then one should intervene directly at the children level to mitigate this effect. If, on the other hand, education is deemed to be sociologically determined, a simple policy recommendation could then include an education policy as education of the parents seems to benefit their children, and those benefits appear to be transmitted across generations. The fact that highly educated individuals seem to free up time only by outsourcing housework could, however, nuance this result, as this outsourcing is likely to rely on the presence of individuals (woman) with a low level of education. Another possibility would therefore be, as proposed by [Gornick and Meyers \(2003\)](#), to join this education policy with a (collective) reduction of the time spent at paid work as we see that a reduction of the time spent at paid work by fathers is linked with a more gender balanced division of unpaid work within couples.

Finally, as mentioned in the Introduction, in this study, we do not discuss other forms of child care than parental childcare, such as formal child care (e.g. crèche or daycare). We nonetheless believe that considering the access, cost, and other features of these child care services (and in particular the public ones) is important when thinking of the time allocations of parents and especially when considering the division of the activities between genders. Furthermore, if we do believe that parents with a higher educational level are better at producing children's human capital, formal child care and schooling system could intervene as a leveling mechanism to try to

reduce the potential “dual disadvantage” faced by children with parents who both have a low level of education, as described by Altintas (2016). This at least while the education policy mentioned above is not in effective.

References

- Akerlof, G. A., and Kranton, R. E. (2000). “Economics and identity.” *The Quarterly Journal of Economics*, 115(3), 715–753.
- Altintas, E. (2016). “The widening education gap in developmental child care activities in the United States, 1965–2013.” *Journal of Marriage and Family*, 78(1), 26–42.
- Amin, M., Islam, A. M., and Sakhonchik, A. (2016). “Does paternity leave matter for female employment in developing economies ? Evidence from firm data.” Policy Research Working Paper Series 7588, The World Bank.
- Ashwin, S., and Isupova, O. (2018). “Anatomy of a stalled revolution: Processes of reproduction and change in Russian women’s gender ideologies.” *Gender & Society*, 32(4), 441–468.
- Becker, G. S. (1965). “A Theory of the Allocation of Time.” *The Economic Journal*, 493–517.
- Belsky, J., and Volling, B. L. (2014). “Mothering, fathering, and marital interaction in the family triad during infancy.” In P. W. Berman, and F. A. Pedersen (Eds.), *Men’s transitions to parenthood: Longitudinal studies of early family experience*, 37–63, New York, NY: Psychology Press.
- Bertrand, M. (2011). “New Perspectives on Gender.” In D. Card, and O. Ashenfelter (Eds.), *Handbook of Labor Economics*, vol. 4, 1543–1590, Elsevier.
- Bianchi, S. M. (2000). “Maternal employment and time with children: Dramatic change or surprising continuity?” *Demography*, 37(4), 401–414.
- Biegel, N., Wood, J., and Neels, K. (2021). “Migrant-native differentials in the uptake of (in)formal childcare in Belgium: The role of mothers’ employment opportunities and care availability.” *Journal of Family Research*, 33(2), 467–508.
- Bisin, A., and Verdier, T. (2011). “The Economics of Cultural Transmission and Socialization.” In J. Benhabib, A. Bisin, and M. O. Jackson (Eds.), *Handbook of Social Economics*, vol. 1, 339–416, North-Holland.
- Bourdieu, P., and Passeron, J.-C. (1964). *Les héritiers : les étudiants et la culture*. Le sens commun, Paris: Editions de Minuit.
- Bourdieu, P., and Passeron, J.-C. (1970). *La reproduction : éléments pour une théorie du système d’enseignement*. Le sens commun, Paris: Editions de Minuit.

- Boyce, C. J. (2010). “Understanding fixed effects in human well-being.” *Journal of Economic Psychology*, 31(1), 1 – 16.
- Capéau, B., Cherchye, L., Decancq, K., Decoster, A., De Rock, B., Maniquet, F., Nys, A., Périlleux, G., Ramaekers, E., Rongé, Z., et al. (2020). *Well-being in Belgium*. Economic Studies in Inequality, Social Exclusion, and Well-Being, Springer.
- Cardia, E., and Gomme, P. (2018). “Market work, housework and childcare: A time use approach.” *Review of Economic Dynamics*, 29, 1–14.
- Cherchye, L., De Rock, B., Surana, K., and Vermeulen, F. (2020). “Marital Matching, Economies of Scale, and Intrahousehold Allocations.” *The Review of Economics and Statistics*, 102(4), 823–837.
- Chiappori, P.-A., Salanié, B., and Weiss, Y. (2017). “Partner Choice, Investment in Children, and the Marital College Premium.” *The American Economic Review*, 107(8), 2109–2167.
- Connelly, R., and Kimmel, J. (2009). “Spousal influences on parents’ non-market time choices.” *Review of Economics of the Household*, 7(4), 361.
- Cowan, C. P., and Cowan, P. A. (2014). “Men’s involvement in parenthood: Identifying the antecedents and understanding the barriers.” In P. W. Berman, and F. A. Pedersen (Eds.), *Men’s transitions to parenthood longitudinal studies of early family experience*, 145–174, New York, NY: Psychology Press.
- Craig, L. (2006). “Does Father Care Mean Fathers Share?: A Comparison of How Mothers and Fathers in Intact Families Spend Time with Children.” *Gender & Society*, 20(2), 259–281.
- De Rock, B., and Perilleux, G. (2021). “Time Use and Life Satisfaction within Couples: A Gender Analysis for Belgium.” Working Papers ECARES 2021-01, ULB – Université libre de Bruxelles.
- Del Boca, D., Flinn, C., and Wiswall, M. (2014). “Household choices and child development.” *Review of Economic Studies*, 81(1), 137–185.
- Dotti Sani, G. M., and Treas, J. (2016). “Educational gradients in parents’ child-care time across countries, 1965–2012.” *Journal of Marriage and Family*, 78(4), 1083–1096.
- Farré, L., and Vella, F. (2013). “The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labour Force Participation.” *Economica*, 80(318), 219–247.
- Fernández, R., Fogli, A., and Olivetti, C. (2004). “Mothers and sons: Preference formation and female labor force dynamics.” *The Quarterly Journal of Economics*, 119(4), 1249–1299.
- Fiorini, M., and Keane, M. P. (2014). “How the allocation of children’s time affects cognitive and noncognitive development.” *Journal of Labor Economics*, 32(4), 787–836.
- Foster, G., and Kalenkoski, C. M. (2013). “Tobit or OLS? An empirical evaluation under different diary window lengths.” *Applied Economics*, 45(20), 2994–3010.

- Francesconi, M., and Heckman, J. J. (2016). “Child Development and Parental Investment: Introduction.” *The Economic Journal*, 126(596), F1–F27.
- Gimenez-Nadal, J. L., and Molina, J. A. (2013). “Parents’ education as a determinant of educational childcare time.” *Journal of Population Economics*, 26(2), 719–749.
- Gobbi, P. E. (2018). “Childcare and commitment within households.” *Journal of Economic Theory*, 176, 503–551.
- Goffin, K., Schooreel, T., Mertens, K., Valsamis, D., and Van der Beken, W. (2018). “Une vision à 360° sur les titres-services.” Rapport final, Idea Consult.
- Gornick, J. C., and Meyers, M. K. (2003). *Families that work: Policies for reconciling parenthood and employment*. Russell Sage Foundation.
- Gosling, S. D., Rentfrow, P. J., and Swann, W. B. (2003). “A very brief measure of the Big-Five personality domains.” *Journal of Research in Personality*, 37(6), 504–528.
- Greenwood, J., Seshadri, A., and Yorukoglu, M. (2005). “Engines of liberation.” *The Review of Economic Studies*, 72(1), 109–133.
- Guryan, J., Hurst, E., and Kearney, M. (2008). “Parental Education and Parental Time with Children.” *The Journal of Economic Perspectives*, 22(3), 23–46.
- Hallberg, D., and Klevmarken, A. (2003). “Time for children: A study of parent’s time allocation.” *Journal of Population Economics*, 16(2), 205–226.
- Jourdain, A., and Naulin, S. (2011). “Héritage et transmission dans la sociologie de Pierre Bourdieu.” *Idées Economiques et Sociales*, (4), 6–14.
- Kalenkoski, C. M., Ribar, D. C., and Stratton, L. S. (2005). “Parental child care in single-parent, cohabiting, and married-couple families: Time-diary evidence from the United Kingdom.” *American Economic Review*, 95(2), 194–198.
- Kalenkoski, C. M., Ribar, D. C., and Stratton, L. S. (2009). “The influence of wages on parents’ allocations of time to child care and market work in the United Kingdom.” *Journal of Population Economics*, 22(2), 399–419.
- Kimmel, J., and Connelly, R. (2007). “Mothers’ time choices: Caregiving, leisure, home production and paid work.” *Journal of Human Resources*, 42(3), 643–681.
- Kleven, H., Landais, C., and Søggaard, J. E. (2019). “Children and gender inequality: Evidence from Denmark.” *American Economic Journal: Applied Economics*, 11(4), 181–209.
- Leduc, E., and Tojerow, I. (2020). “Subsidizing Domestic Services as a Tool to Fight Unemployment: Effectiveness and Hidden Costs.” IZA Discussion Paper No. 13544.

- Lise, J., and Seitz, S. (2011). "Consumption inequality and intra-household allocations." *The Review of Economic Studies*, 78(1), 328–355.
- McGinn, K. L., Castro, M. R., and Lingo, E. L. (2019). "Learning from Mum: Cross-National Evidence Linking Maternal Employment and Adult Children's Outcomes." *Work, Employment and Society*, 33(3), 374–400.
- Meulders, D., and O'Dorchai, S. P. (2008). "Childcare in Belgium." ULB, DULBEA, Bruxelles.
- Milkie, M. A., Nomaguchi, K. M., and Denny, K. E. (2015). "Does the amount of time mothers spend with children or adolescents matter?" *Journal of Marriage and Family*, 77(2), 355–372.
- Monna, B., and Gauthier, A. H. (2008). "A review of the literature on the social and economic determinants of parental time." *Journal of Family and Economic Issues*, 29(4), 634–653.
- Morrill, M. S., and Morrill, T. (2013). "Intergenerational links in female labor force participation." *Labour Economics*, 20, 38–47.
- Olivetti, C., Patacchini, E., and Zenou, Y. (2020). "Mothers, Peers, and Gender-Role Identity." *Journal of the European Economic Association*, 18(1), 266–301.
- Organisation for Economic Co-operation and Development (OECD) (2021). "Enrolment rates by age." https://stats.oecd.org/Index.aspx?datasetcode=EAG_ENRL_RATE_AGE, consulted 10/12/2021.
- Papapetrou, E., and Tsalaporta, P. (2018). "Is There a Case for Intergenerational Transmission of Female Labour Force Participation and Educational Attainment? Evidence From Greece During The Crisis." *Labour*, 32(4), 237–258.
- Raley, R. K., and Sweeney, M. M. (2020). "Divorce, repartnering, and stepfamilies: A decade in review." *Journal of Marriage and Family*, 82(1), 81–99.
- Ramey, C. T., and Ramey, S. L. (2010). "The transition to school: Concepts, practices, and needed research." In S. L. Kagan, and K. Tarrant (Eds.), *Transitions for young children: Creating connections across early childhood systems*, 19–32, Paul H. Brookes Publishing Co.
- Sandberg, J. F., and Hofferth, S. L. (2001). "Changes in children's time with parents: United States, 1981–1997." *Demography*, 38(3), 423–436.
- Sandberg, J. F., and Hofferth, S. L. (2005). "Changes in children's time with parents: A correction." *Demography*, 42(2), 391–395.
- Sayer, L., Bianchi, S., and Robinson, J. (2004). "Are Parents Investing Less in Children? Trends in Mothers' and Fathers' Time with Children." *American Journal of Sociology*, 110(1), 1–43.
- Schoonbroodt, A. (2018). "Parental child care during and outside of typical work hours." *Review of Economics of the Household*, 16(2), 453–476.

- Sigle-Rushton, W. (2010). “Men’s unpaid work and divorce: Reassessing specialization and trade in British families.” *Feminist Economics*, 16(2), 1–26.
- Statistics Belgium (Statbel) (2021). “Gender pay gap in unadjusted form.” https://ec.europa.eu/eurostat/web/products-datasets/-/sdg_05_20, retrieved 09/12/2021.
- Stewart, J. (2013). “Tobit or not tobit?” *Journal of Economic and Social Measurement*, 38(3), 263–290.
- Tamm, M. (2019). “Fathers’ parental leave-taking, childcare involvement and labor market participation.” *Labour Economics*, 59, 184–197.
- Unterhofer, U., and Wrohlich, K. (2017). “Fathers, Parental Leave and Gender Norms.” Discussion Papers of DIW Berlin 1657, DIW Berlin, German Institute for Economic Research.
- You, W., and Davis, G. C. (2011). “Childhood overweight: Does quality of parental childcare time matter?” *Journal of Family and Economic Issues*, 32(2), 219–232.
- Zick, C. D., and Bryant, W. (1996). “A New Look at Parents’ Time Spent in Child Care: Primary and Secondary Time Use.” *Social Science Research*, 25(3), 260–280.

A Appendix

Figure A.1: Generalized Lorenz curves of childcare time (by men and women) per education groups

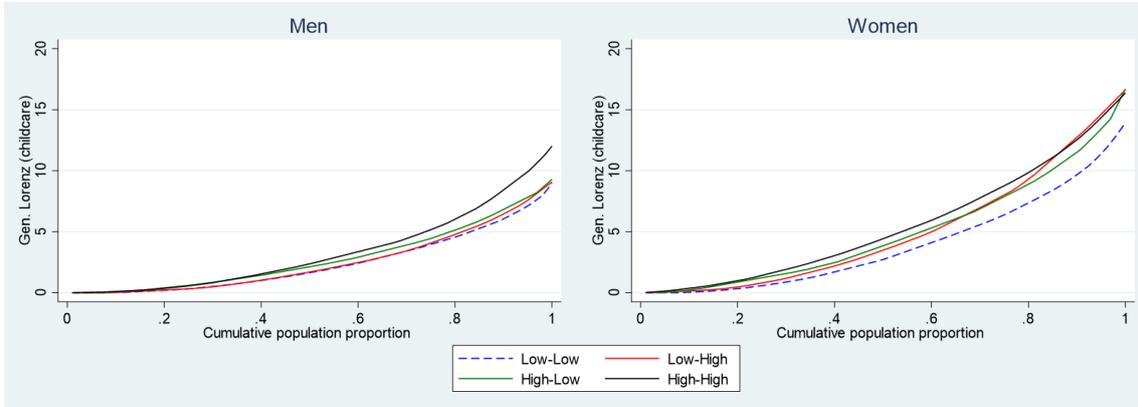


Figure A.2: Generalized Lorenz curves of money spent on children and public goods per education groups

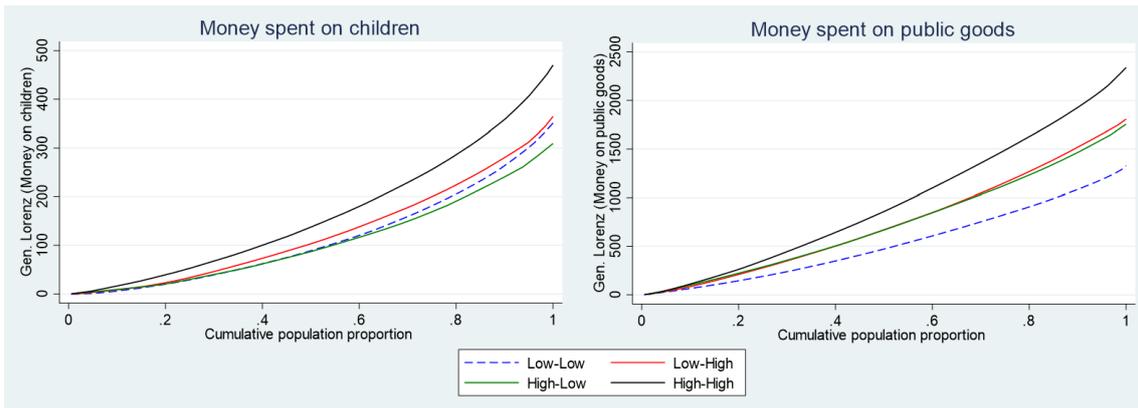


Figure A.3: Means of household's income per education types with 95% confidence intervals

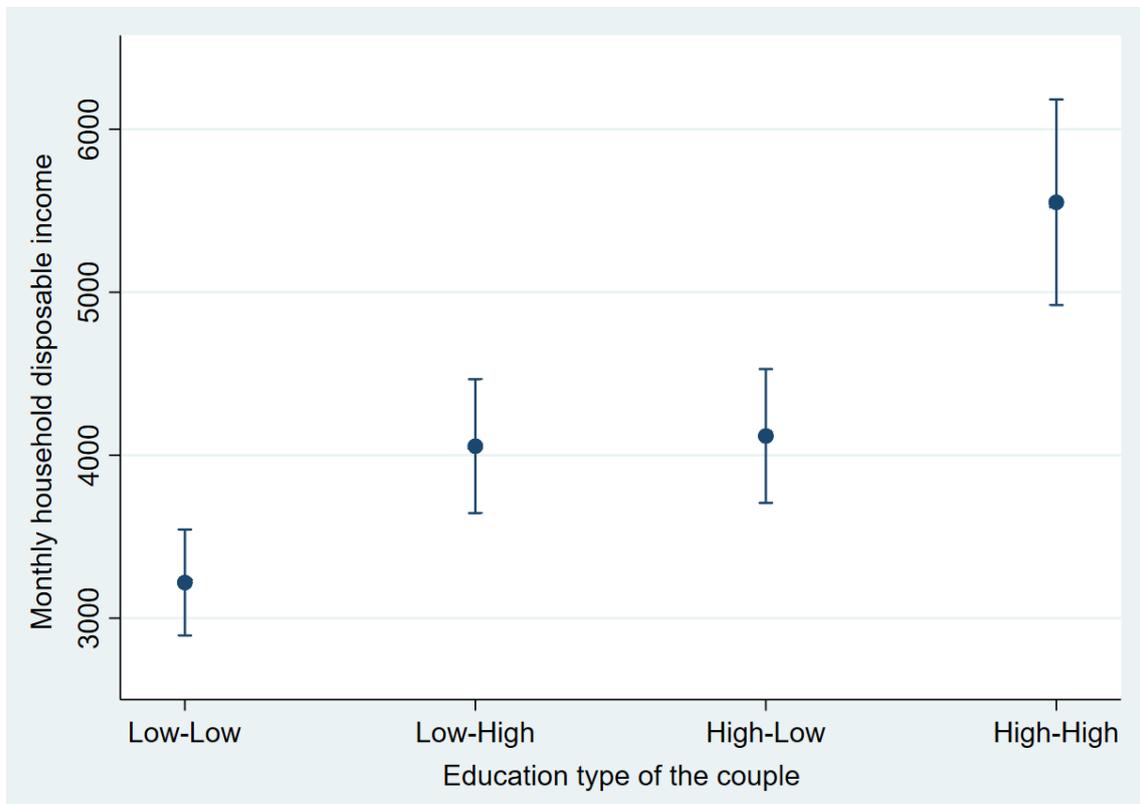


Table A.1: Description of the variables used, their collection and values

Variable	Collection	Values
Education	Constructed from answers to: “What is the highest level of education you have successfully completed?”	Low (=at least secondary but not higher); High (=at least higher than secondary)
Time spent at paid work and commuting	Constructed (by data managers): sum of answers to: “How much time do you spend during a typical week on your paid work?” and “How much time do you spend during a typical week on commuting between your house and your place of work?”	Hours per week
Time spent at housekeeping	Answers to: “How much time do you spend during a typical week on household tasks like cooking, grocery shopping, cleaning, etc.?”	Hours per week
Time spent at childcare	Answers to: “How much time do you spend during a typical week on activities with the children in your household?”	Hours per week
Time spent at Leisure	Answers to: “How much time do you spend during a typical week on leisure activities?”	Hours per week
Money spent on children	Constructed (by data managers) as the monthly household spending on children (including food and transport) = sum of answers to: “amount spent per month on children under the age of 18 (such as nursery, day care, clothing and toys)”, “share of transport expenditures going to children” and “share of expenditures on food and beverages consumed at home going to children”	Per month
Money spent on public goods	Constructed (by data managers) as the monthly household spending on public goods (including a virtual rent for owner-occupiers) = sum of answers to “Monthly household spending on”: “(virtual) rent”, “utilities and insurance”, “outings”, “vacations”, “common transport” and “other things”	Per month (set to a missing if one component of the sum is missing)
Age of respondent	age of respondent, expressed in completed years at the time of the interview.	Numerical
Working status	Constructed from variables: “Are you currently in paid employment?” and “Do you work full-time or part-time?”	Not working; Working FT; Working PT
Health (self-perceived)	Constructed from answers to: “How would you generally characterize your health?”	Low (=Fair, and Bad); Good (=Good); High (=Very good, and Excellent)
Household income	Constructed (by data managers) as the household disposable income (including guess of child benefits, without social corrections)	Per month
Household non-labor income	Constructed: sum of variables (constructed by data managers): 2 at the individual level: “Benefits including alimony, excluding pensions and child benefits” and “Individual income from pensions”, summed to have household value; and 2 at the household level: “Household income from real estate”, and “Imputed child benefits”. Capital income was not included given the high number of missing values.	Per month
Number of children	Constructed (by data managers) as the number of household members that are younger than 18	Numerical
Other adults in the household	Constructed: binary, set to 1 if more than two adults (i.e. individuals older than 18 years old) in the household	Binary
Children under 3	Constructed: binary, set to 1 if the age of a member of the household identified as a child (with/not with current spouse or partner; of current spouse of partner; of former spouse or partner) is under 3	Binary
Children between 3 and 6	Constructed: binary, set to 1 if the age of a member of the household identified as a child (with/not with current spouse or partner; of current spouse of partner; of former spouse or partner) is between 3 and 6	Binary
Children between 6 and 12	Constructed: binary, set to 1 if the age of a member of the household identified as a child (with/not with current spouse or partner; of current spouse of partner; of former spouse or partner) is between 6 and 12	Binary

Note: More information on the content and structure of the MEqIn dataset, as well as how the variables were collected and/or constructed can be found on: <https://sites.google.com/view/meqin/data>

Table A.2: Fraction of zeroes observed for the various activities.

Activities		Fraction of zeroes
Childcare	Father	5.26%
	Mother	3.75%
Paid work	Father	7.14%
	Mother	20.30%
Domestic work	Father	6.02%
	Mother	0.37%
Leisure	Father	5.26%
	Mother	4.51%

Note: This table shows the fraction of zeroes observed for each activities when the SUR regression is performed. Fraction are shown instead of absolute numbers since the *cmp* command in Stat allows for different number of observations in the different regressions of the model.

Table A.3: Tobit SUR estimates - with total household childcare

		Household	Paid work		Domestic work		Leisure		log(Money spent on children)
		Childcare	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Education type of the couple	Low-High	1.538 (2.461)	11.002*** (3.465)	15.141*** (3.955)	-0.854 (1.411)	-7.253*** (1.837)	1.987 (2.411)	0.854 (1.926)	0.181 (0.136)
(Man-Woman - OC: Low-Low)	High-Low	3.326 (3.103)	6.723* (3.878)	4.088 (5.020)	-1.673 (1.587)	-4.567* (2.332)	1.519 (2.165)	2.020 (2.492)	0.047 (0.131)
	High-High	4.741** (2.408)	11.259*** (3.177)	21.647*** (3.903)	1.371 (0.998)	-8.976*** (1.655)	3.100* (1.621)	-1.307 (1.707)	0.343*** (0.105)
Log (Household non-labor income)		0.901 (0.924)	-5.295*** (1.403)	-2.057 (1.305)	-0.207 (0.510)	-0.843 (0.605)	0.010 (0.591)	0.249 (0.666)	0.068 (0.081)
Other adults in Household		-6.876*** (2.414)	5.006 (4.059)	4.099 (4.574)	-0.946 (1.611)	2.410 (2.679)	0.191 (2.378)	-1.937 (2.789)	-0.194 (0.146)
Number of children in Household		-2.427** (0.954)	3.376** (1.693)	-6.131*** (2.139)	0.647 (0.532)	5.150*** (1.063)	-0.115 (0.889)	0.138 (0.929)	0.263*** (0.053)
Children under 3		8.374*** (3.238)	0.833 (3.913)	-1.220 (4.661)	-0.500 (1.094)	0.600 (1.853)	0.484 (1.823)	-3.207 (1.962)	-0.131 (0.101)
Children between 3 and 6		13.147*** (2.604)	-0.443 (2.677)	3.588 (3.015)	-1.553 (0.961)	-2.571* (1.446)	-1.450 (1.532)	-3.014* (1.574)	-0.144 (0.094)
Children between 6 and 12		3.204 (2.054)	1.001 (3.032)	3.433 (3.962)	0.495 (1.006)	-0.883 (1.890)	1.340 (1.620)	0.612 (1.858)	-0.124 (0.096)
Constant		55.254* (30.642)	-21.107 (45.540)	0.546 (48.969)	13.369 (11.387)	28.615 (21.988)	35.062 (24.396)	66.237*** (24.257)	4.439*** (1.100)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (7) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, as well as the region of residence.

Table A.4: Tobit SUR estimates - with money spent on public goods

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on public goods)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type of the couple	Low-High	-1.120 (1.325)	3.033 (1.948)	11.038*** (3.453)	15.381*** (4.003)	-0.845 (1.389)	-7.310*** (1.841)	2.028 (2.403)	0.798 (1.925)	0.297*** (0.064)
OC: Low-Low)	High-Low	-0.106 (1.679)	2.313 (2.347)	6.660* (3.836)	4.752 (4.989)	-1.598 (1.565)	-4.652** (2.333)	1.372 (2.177)	1.950 (2.485)	0.288*** (0.066)
	High-High	2.872** (1.351)	2.097 (1.579)	11.229*** (3.177)	22.516*** (3.927)	1.385 (0.996)	-9.193*** (1.661)	3.019* (1.610)	-1.422 (1.717)	0.536*** (0.062)
Log (Household non-labor income)		0.126 (0.475)	0.266 (0.624)	-5.366*** (1.411)	-2.082 (1.319)	-0.207 (0.490)	-0.855 (0.601)	-0.042 (0.596)	0.256 (0.663)	0.001 (0.019)
Other adults in Household		-3.147** (1.543)	-4.264** (1.683)	4.907 (4.033)	5.001 (4.537)	-0.867 (1.589)	2.143 (2.673)	0.097 (2.352)	-1.935 (2.797)	0.144* (0.074)
Number of children in Household		-1.465*** (0.506)	-1.163 (0.807)	3.293* (1.702)	-5.690*** (2.041)	0.696 (0.525)	5.052*** (1.052)	-0.171 (0.875)	0.093 (0.924)	0.009 (0.027)
Children under 3		2.294 (1.679)	7.770*** (2.036)	1.273 (3.927)	-2.826 (4.527)	-0.652 (1.095)	1.094 (1.840)	0.821 (1.828)	-2.993 (1.934)	-0.070 (0.070)
Children between 3 and 6		7.694*** (1.488)	6.340*** (1.779)	-0.303 (2.689)	2.882 (3.111)	-1.620* (0.957)	-2.311 (1.446)	-1.233 (1.533)	-2.947* (1.573)	-0.037 (0.054)
Children between 6 and 12		1.686 (1.193)	1.837 (1.513)	1.174 (3.036)	3.281 (3.960)	0.463 (1.000)	-0.816 (1.889)	1.411 (1.614)	0.665 (1.871)	0.001 (0.051)
Constant		9.338 (14.752)	15.524 (18.709)	-23.401 (42.894)	22.236 (45.794)	15.068 (11.445)	22.449 (21.152)	31.155 (24.559)	63.937*** (24.289)	5.869*** (0.576)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, as well as the region of residence.

Table A.5: Tobit SUR estimates - With the time and money spent per children

		Childcare per children		Paid work		Domestic work		Leisure		log(Money spent on children /#children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type of the couple (Man-Woman - OC: Low-Low)	Low-High	0.092 (1.065)	3.096** (1.430)	11.041*** (3.477)	14.975*** (3.949)	-0.850 (1.412)	-7.221*** (1.827)	2.188 (2.405)	0.852 (1.938)	0.189 (0.142)
	High-Low	1.620 (1.537)	4.010 (2.457)	6.573* (3.875)	3.767 (5.035)	-1.597 (1.593)	-4.517* (2.310)	1.696 (2.192)	2.017 (2.505)	0.072 (0.136)
	High-High	1.953** (0.971)	1.865* (1.122)	11.180*** (3.189)	21.441*** (3.854)	1.412 (1.004)	-8.931*** (1.652)	3.216** (1.609)	-1.342 (1.712)	0.303*** (0.111)
Log (Household non- labor income)		-0.879* (0.503)	-1.137* (0.599)	-5.372*** (1.442)	-1.848 (1.298)	-0.193 (0.515)	-0.877 (0.624)	-0.320 (0.623)	0.213 (0.698)	0.003 (0.075)
Constant		23.604* (12.314)	32.308** (14.057)	-24.514 (44.424)	-2.314 (48.576)	14.974 (11.287)	28.725 (22.027)	35.499 (24.665)	66.083*** (24.199)	5.213*** (1.178)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are similar than in the previous cases and available upon request.

Table A.6: Tobit SUR estimates - controlling for total disposable income only in the last regression

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type of the couple	Low-High	-1.118 (1.324)	3.095 (1.965)	10.978*** (3.456)	15.101*** (3.964)	-0.856 (1.395)	-7.259*** (1.841)	2.006 (2.397)	0.839 (1.927)	0.189 (0.131)
(Man-Woman - OC: Low-Low)	High-Low	-0.081 (1.672)	2.407 (2.354)	6.499* (3.836)	4.040 (5.034)	-1.648 (1.575)	-4.558* (2.339)	1.345 (2.183)	1.996 (2.489)	-0.047 (0.133)
	High-High	2.891** (1.352)	2.330 (1.571)	11.191*** (3.171)	21.534*** (3.894)	1.397 (0.999)	-8.941*** (1.658)	3.023* (1.610)	-1.357 (1.703)	0.254** (0.129)
Log (Household non-labor income)		0.110 (0.469)	0.187 (0.605)	-5.703*** (1.466)	-2.343* (1.379)	-0.290 (0.467)	-0.874 (0.609)	-0.127 (0.589)	0.311 (0.688)	
Log (Household total income)										0.128 (0.119)
Constant		9.828 (14.843)	20.027 (18.806)	-25.085 (43.363)	1.473 (49.563)	14.725 (11.465)	28.511 (21.986)	31.287 (24.591)	64.973*** (24.146)	3.652*** (1.414)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are similar than in the previous cases and available upon request.

Table A.7: Tobit SUR estimates - With the share of income spent on children

		Childcare		Paid work		Domestic work		Leisure		Share of income spent
		Men	Women	Men	Women	Men	Women	Men	Women	on children
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type	Low-High	-1.120	3.062	11.079***	15.269***	-0.833	-7.251***	2.030	0.811	-0.016
	of the couple	(1.325)	(1.953)	(3.468)	(3.979)	(1.388)	(1.842)	(2.402)	(1.925)	(0.011)
(Man-Woman -	High-Low	-0.089	2.364	6.596*	4.316	-1.623	-4.564*	1.369	1.978	-0.036***
OC: Low-Low)		(1.674)	(2.354)	(3.862)	(5.054)	(1.568)	(2.338)	(2.182)	(2.491)	(0.011)
	High-High	2.879**	2.240	11.209***	21.717***	1.375	-8.971***	3.023*	-1.350	-0.032***
		(1.351)	(1.563)	(3.183)	(3.903)	(0.996)	(1.656)	(1.612)	(1.706)	(0.010)
Log (Household non-		0.130	0.286	-5.398***	-2.162*	-0.214	-0.837	-0.040	0.263	
	labor income)	(0.471)	(0.614)	(1.425)	(1.280)	(0.489)	(0.594)	(0.593)	(0.664)	
Constant		9.612	19.438	-25.267	1.928	14.498	28.577	31.097	65.545***	0.124
		(14.825)	(18.639)	(43.027)	(48.489)	(11.414)	(21.535)	(24.521)	(24.338)	(0.101)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are similar than in the previous cases and available upon request.

Table A.8: Tobit SUR estimates - Controlling for relative wage

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type of the couple (Man-Woman - OC: Low-Low)	Low-High	-0.658 (1.394)	2.948 (2.032)	1.203 (2.992)	7.314*** (2.197)	-0.524 (1.679)	-5.051*** (1.481)	1.624 (2.325)	-0.364 (2.195)	0.167 (0.156)
	High-Low	1.198 (1.993)	2.367 (2.384)	0.328 (2.984)	-0.809 (3.384)	-2.582 (1.906)	-2.664 (2.366)	-0.448 (2.272)	-1.423 (2.551)	-0.061 (0.173)
	High-High	3.653** (1.456)	2.695 (1.694)	0.710 (2.761)	4.579** (2.248)	1.335 (1.261)	-4.527*** (1.685)	1.920 (1.875)	-1.615 (1.988)	0.143 (0.150)
Log(Household non-labor income) relative wage		-0.170 (0.430)	0.348 (0.556)	-1.273 (0.791)	0.665 (0.736)	-0.360 (0.694)	-0.492 (0.547)	0.117 (0.541)	-0.193 (0.554)	0.108 (0.099)
		-0.098 (0.214)	-0.120 (0.235)	0.636* (0.367)	0.309 (0.200)	-0.316** (0.123)	-0.246 (0.183)	-0.234 (0.325)	0.040 (0.290)	0.018 (0.018)
	Constant	17.646 (25.857)	21.050 (21.130)	61.705* (34.934)	-0.202 (36.759)	18.652 (21.500)	16.860 (21.774)	11.779 (27.509)	102.478*** (29.060)	5.453*** (1.772)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 196. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are available upon request.

Table A.9: Tobit SUR estimates - Controlling for the individuals' hourly wage

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type	Low-High	-0.070	3.176*	2.058	8.257***	-0.169	-5.314***	2.668	1.039	0.195
of the couple		(1.159)	(1.855)	(2.641)	(2.086)	(1.447)	(1.404)	(2.381)	(2.000)	(0.129)
(Man-Woman -	High-Low	0.437	2.436	3.430	0.545	-2.255	-3.041	-1.063	-0.301	-0.015
OC: Low-Low)		(1.758)	(2.148)	(2.481)	(3.120)	(1.750)	(2.250)	(2.183)	(2.233)	(0.133)
	High-High	2.894**	3.059*	4.277*	6.279***	1.089	-4.282***	1.058	-1.248	0.246**
		(1.286)	(1.563)	(2.256)	(2.144)	(1.155)	(1.592)	(1.865)	(1.760)	(0.106)
Log(Household non-		-0.231	0.329	-0.808	0.680	-0.302	-0.475	0.089	-0.316	0.098
labor income)		(0.419)	(0.548)	(0.715)	(0.723)	(0.583)	(0.538)	(0.541)	(0.582)	(0.087)
Individual's wage		0.087	-0.041	-0.383*	-0.353***	0.079	-0.079	0.188	0.090	0.007
		(0.076)	(0.077)	(0.205)	(0.114)	(0.074)	(0.070)	(0.138)	(0.162)	(0.006)
Constant		16.429	12.945	65.280***	-0.086	5.128	16.442	-0.206	80.764***	5.151***
		(16.155)	(20.105)	(21.811)	(35.086)	(13.145)	(19.025)	(21.004)	(27.779)	(1.234)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 249. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are available upon request.

Table A.10: Tobit SUR estimates - With the working status

		Childcare		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)
Education type of the couple (Man-Woman - OC: Low-Low)	Low-High	-0.403 (1.255)	3.952** (1.975)	-0.766 (1.378)	-4.413*** (1.607)	1.904 (2.396)	1.223 (1.951)	0.141 (0.134)
	High-Low	0.387 (1.548)	2.524 (2.367)	-1.703 (1.662)	-3.821* (2.022)	1.013 (2.213)	2.223 (2.376)	-0.004 (0.129)
	High-High	3.690*** (1.299)	3.239* (1.747)	1.427 (1.024)	-5.013*** (1.486)	2.783* (1.678)	-0.491 (1.762)	0.284*** (0.105)
Working status (OC: Employed FT)	Not working	5.129 (3.305)	3.301 (2.012)	0.493 (2.056)	12.840*** (2.003)	-0.885 (2.958)	2.886 (2.062)	-0.324* (0.170)
	Employed PT	3.959** (1.820)	2.086* (1.237)	2.983 (2.275)	4.573*** (1.259)	4.562 (3.140)	-0.634 (1.343)	0.008 (0.150)
	Constant	3.799 (15.953)	15.408 (19.838)	12.720 (11.859)	19.851 (19.487)	31.113 (24.553)	64.953*** (25.064)	4.384*** (1.084)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (6) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 267. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is available upon request. We control as well in each regression for the age of the individuals, the logarithm of the household non-labor income, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are similar than in the previous cases and available upon request.

Table A.11: Proportions of the levels of education of the grandparents

Frequency of the group	Man's		Woman's	
	Father	Mother	Father	Mother
Low	0.450 (0.033)	0.473 (0.033)	0.420 (0.033)	0.484 (0.033)
High	0.550 (0.033)	0.527 (0.033)	0.580 (0.033)	0.516 (0.033)
N	255	259	257	260

Table A.12: Correlation of education level of the fathers and their parents

	Grand-father	Grand-mother	father
Grand-father	1		
Grand-mother	0.6407	1	
father	0.2568	0.3503	1

Table A.13: Correlation of education level of the mothers and their parents

	Grand-father	Grand-mother	mother
Grand-father	1		
Grand-mother	0.5043	1	
mother	0.3393	0.3826	1

Table A.14: Correlation matrix of residuals from the model presented in Table 5

		Childcare		Paid		Domestic		Leisure		log(Money spent on children)
		Father	Mother	Father	Mother	Father	Mother	Father	Mother	
Childcare	Father	1								
	Mother	0.349*** (0.085)	1							
Paid work	Father	-0.159** (0.079)	0.196** (0.077)	1						
	Mother	0.102 (0.067)	-0.122 (0.075)	0.106 (0.085)	1					
Domestic work	Father	0.109 (0.075)	-0.117* (0.065)	-0.199*** (0.067)	0.097 (0.065)	1				
	Mother	-0.181*** (0.069)	0.121** (0.061)	0.138* (0.080)	-0.518*** (0.075)	-0.079 (0.077)	1			
Leisure	Father	0.127* (0.066)	0.156* (0.081)	-0.145* (0.078)	-0.009 (0.074)	0.182*** (0.068)	0.056 (0.073)	1		
	Mother	0.005 (0.058)	0.113 (0.073)	0.036 (0.090)	-0.221*** (0.079)	0.100* (0.059)	0.170*** (0.059)	0.437*** (0.074)	1	
log(Money spent on children)		0.113 (0.090)	0.170** (0.081)	0.185** (0.073)	0.158*** (0.057)	0.205*** (0.080)	-0.068 (0.071)	0.105 (0.064)	-0.020 (0.059)	1

Note: Correlation matrix of residuals. In particular, the table shows the arc-hyperbolic tangents of the ρ 's obtained from the SUR system exposed in Table 5.

Table A.15: Rest of the Tobit SUR estimates when grandparents' education is considered (Table 5)

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Age		-0.671 (0.817)	0.090 (0.927)	5.020** (2.204)	1.929 (2.814)	-0.244 (0.601)	-1.197 (1.158)	-0.758 (1.180)	-2.110* (1.174)	0.036 (0.054)
Age squared		0.006 (0.009)	-0.006 (0.011)	-0.057** (0.026)	-0.020 (0.038)	0.003 (0.007)	0.015 (0.015)	0.011 (0.014)	0.030* (0.016)	-0.000 (0.001)
Log (Household non-labor income)		0.335 (0.528)	0.276 (0.636)	-5.845*** (1.637)	-1.289 (1.246)	-0.071 (0.494)	-0.938 (0.645)	0.171 (0.608)	0.002 (0.637)	0.068 (0.082)
Father's health	High	-0.741 (1.269)	-0.176 (1.542)	2.191 (2.783)	2.774 (3.017)	-0.541 (1.010)	-0.044 (1.386)	-1.558 (1.539)	0.358 (1.369)	0.052 (0.090)
health)	Low	-2.120 (1.861)	1.438 (2.456)	-0.136 (6.063)	0.081 (5.683)	-0.366 (1.517)	-0.649 (2.298)	-1.489 (2.499)	0.576 (2.552)	-0.047 (0.211)
Mother's health	High	1.080 (1.310)	-2.991* (1.630)	1.905 (2.859)	4.609 (3.348)	-0.082 (1.052)	1.345 (1.553)	-3.833** (1.597)	-1.009 (1.429)	-0.055 (0.093)
health)	Low	0.744 (1.500)	-4.337 (3.072)	-1.396 (4.983)	-6.554 (6.333)	-2.668* (1.413)	-0.954 (2.415)	-1.079 (2.535)	-1.317 (2.391)	-0.127 (0.127)
Other adults in Household		-6.073*** (1.590)	-3.814** (1.733)	4.706 (4.618)	0.341 (4.832)	-1.189 (1.780)	3.884 (2.701)	-0.123 (2.415)	-3.463 (2.520)	-0.240 (0.153)
Number of children in Household		-1.096** (0.511)	-0.213 (0.853)	2.798 (1.791)	-3.460 (2.435)	0.930 (0.568)	3.938*** (1.250)	0.120 (0.815)	-0.873 (0.760)	0.313*** (0.067)
Children under 3		2.166 (1.737)	6.521*** (1.987)	0.010 (4.465)	2.322 (4.344)	-0.119 (1.120)	-1.535 (1.828)	1.748 (1.825)	-2.001 (1.911)	-0.174* (0.100)
Children between 3 and 6		7.148*** (1.605)	4.943*** (1.818)	-0.613 (3.366)	4.602 (3.200)	-1.637 (1.050)	-3.103** (1.456)	-1.149 (1.642)	-1.881 (1.496)	-0.171* (0.102)
Children between 6 and 12		0.360 (1.271)	0.592 (1.558)	-0.183 (3.548)	0.775 (4.079)	0.658 (1.116)	0.351 (2.071)	0.860 (1.601)	0.746 (1.821)	-0.192* (0.103)
Region	Flanders	1.898 (1.470)	3.271 (2.092)	10.048** (5.032)	11.615** (5.831)	3.560*** (1.350)	7.598*** (1.974)	3.364 (3.281)	1.327 (2.321)	-0.001 (0.123)
(OC: Brussels)	Wallonia	2.660 (1.677)	6.518*** (2.433)	4.999 (5.208)	6.840 (6.227)	0.154 (1.468)	3.071* (1.861)	4.504 (3.497)	4.803* (2.649)	-0.069 (0.139)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 266.

Table A.16: Tobit SUR estimates when grandparents' education is considered and with money spent on public goods

	Childcare		Paid work		Domestic work		Leisure		log(Money spent on public goods)
	Men	Women	Men	Women	Men	Women	Men	Women	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Paternal grand-father's education = High	5.941*** (1.594)		-2.329 (3.185)		-0.765 (1.176)		-0.245 (1.470)		0.026 (0.058)
Paternal grand-mother's education = High	-2.408 (1.493)		4.973 (3.217)		1.716 (1.258)		0.290 (1.488)		0.150*** (0.057)
Maternal grand-father's education = High		-0.080 (1.628)		3.657 (3.131)		-3.368** (1.379)		0.233 (1.521)	0.013 (0.053)
Maternal grand-mother's education = High		1.118 (1.660)		10.832*** (3.268)		-4.010*** (1.326)		-1.331 (1.612)	0.206*** (0.051)
Constant	0.771 (1.498)	-4.232 (3.065)	-1.266 (4.945)	-6.597 (6.210)	-2.671* (1.408)	-0.891 (2.408)	-1.089 (2.536)	-1.312 (2.382)	-0.073 (0.076)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 266. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is very similar to the one shown in Table A.14, and is available upon request. We control as well in each regression for the age of the individuals, the logarithm of the household non-labor income, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are very close to the ones found in Table A.15, and are available upon request.

Table A.17: Tobit SUR estimates when grandparents' education is considered together with the combination of parents' education

		Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
		Men	Women	Men	Women	Men	Women	Men	Women	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Education type of the couple	Low-High	-1.189 (1.421)	2.123 (1.998)	10.243*** (3.756)	11.159*** (4.143)	-0.706 (1.604)	-5.263*** (1.913)	2.121 (2.454)	2.539 (1.896)	0.059 (0.162)
(Man-Woman - OC: Low-Low)	High-Low	-0.311 (1.650)	1.330 (2.484)	6.711* (3.921)	0.283 (5.049)	-1.998 (1.620)	-3.143 (2.397)	1.851 (2.225)	3.885 (2.497)	-0.018 (0.147)
	High-High	2.168 (1.462)	0.873 (1.866)	12.278*** (3.538)	14.927*** (4.181)	0.953 (1.133)	-5.388*** (1.830)	3.779** (1.817)	-0.034 (1.796)	0.256* (0.141)
Paternal grand-father's education = High		4.910*** (1.418)		-3.570 (3.054)		-0.607 (1.208)		-0.521 (1.549)		0.167 (0.117)
Paternal grand-mother's education = High		-2.021 (1.316)		0.634 (3.049)		1.526 (1.291)		-0.296 (1.571)		-0.046 (0.111)
Maternal grand-father's education = High			-0.264 (1.707)		2.070 (3.115)		-2.673* (1.416)		0.285 (1.457)	0.105 (0.090)
Maternal grand-mother's education = High			2.066 (1.678)		7.928** (3.305)		-2.897** (1.421)		-0.662 (1.733)	-0.028 (0.098)
Constant		14.742 (14.202)	19.566 (19.846)	-27.155 (43.077)	4.731 (51.928)	15.953 (11.841)	29.098 (21.677)	32.637 (24.740)	49.200** (22.179)	4.746*** (1.200)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 262. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is similar to the one shown in Table A.14, and is available upon request. We control as well in each regression for the age of the individuals, the logarithm of the household non-labor income, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are close to the ones found in Table A.15, and are available upon request.

Table A.18: Tobit SUR estimates when grandparents' education on both side (paternal and maternal) is considered

	Childcare		Paid work		Domestic work		Leisure		log(Money spent on children)
	Men	Women	Men	Women	Men	Women	Men	Women	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Paternal grand-father's education = High	5.224*** (1.616)	-2.740 (1.890)	-1.624 (3.397)	4.119 (3.702)	-0.739 (1.246)	2.078 (1.552)	0.261 (1.623)	1.079 (1.477)	0.168 (0.110)
Paternal grand-mother's education = High	-0.550 (1.510)	3.422* (1.759)	3.793 (3.450)	4.911 (3.600)	0.703 (1.321)	-3.792** (1.619)	-0.649 (1.562)	-2.882* (1.489)	0.050 (0.120)
Maternal grand-father's education = High	-0.002 (1.451)	-0.754 (2.106)	-2.033 (3.329)	1.522 (3.241)	0.114 (1.094)	-2.928** (1.341)	-0.564 (1.812)	0.107 (1.661)	0.068 (0.092)
Maternal grand-mother's education = High	0.610 (1.373)	2.748 (1.706)	5.426* (2.832)	9.839*** (3.367)	1.998* (1.051)	-2.885** (1.251)	3.225** (1.604)	0.541 (1.764)	0.086 (0.084)
Constant	22.434 (18.083)	22.094 (19.480)	-49.477 (46.621)	-22.522 (54.330)	5.607 (11.860)	35.878 (22.278)	33.560 (22.054)	48.671** (22.684)	3.983*** (1.078)

Note: Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Each column reports the results obtained for the different dependent variables considered and estimated jointly. Columns (1) to (8) reports the marginal effects on the uncensored latent variable. Average marginal effects on the observed outcome are available upon request. The *cmp* command allows the number of observations to differ from one regression to another. The total number of observations used for this model is 266. We further allow for the possibility of correlation in the unobserved determinants of our dependent variables, the correlation matrix obtained is very similar to the one shown in Table A.14, and is available upon request. We control as well in each regression for the age of the individuals, the logarithm of the household non-labor income, the health status of both partners, the presence of other adults in the household, the number of children, dummy variables indicating the presence of children: under 3, between 3 and 6, between 6 and 12, as well as the region of residence of the household. The results for those variables are very close to the ones found in Table A.15, and are available upon request.