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*Descriptive Finding*

## **Gendered intergenerational time transfers in Estonia**

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## Contents

1	Introduction and background	840
2	Data, variables, and method	841
3	Results	843
4	Summary and discussion	847
5	Acknowledgements	848
	References	849

## **Gendered intergenerational time transfers in Estonia**

**Katrin Schwanitz<sup>1</sup>**

### **Abstract**

#### **BACKGROUND**

Extant research on intergenerational domestic time transfers rarely includes Estonia. This, combined with distinct socio-structural features relevant to such transfers – a post-communist welfare regime, high female labor force participation, and high levels of gender inequality in domestic and care work – makes Estonia a very interesting study setting.

#### **OBJECTIVES**

I examine gendered intergenerational time transfers in Estonia and their (dis)similarity to patterns found in France and Italy.

#### **METHODS**

I draw on Estonian Time Use Survey (ETUS) data from the most recent edition (2009–2010) and estimate OLS regression models with clustered standard errors separately for men and women. ( $N_{S1} = 772$  person days;  $N_{S2} = 1,348$  person days;  $N_{S3} = 2,481$  person days).

#### **RESULTS**

Intergenerational time transfers follow a downward pattern, from parents to adult children, and are mostly maintained through mothers' high absolute and relative contribution to housework. The participation in domestic tasks of young adults coresiding with parents is also strongly gendered and is mainly related to time availability. Young men and women outside the parental home generally incur time costs, except for single young women, but gender inequality persists across life-course stages.

#### **CONCLUSION**

Intergenerational time transfers in Estonia resemble those in Italy more than those in France: there is a marked gender asymmetry, yet not of the same magnitude and with a unique life-course dynamic. Consistent with multi-dimensional gender differentiation, most family arrangements are time-intensive for women.

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## **CONTRIBUTION**

This is the first study to empirically illustrate gendered intergenerational time transfers in Estonia, underscoring that intergenerational time exchanges are gendered in context-specific ways.

## **1. Introduction and background**

Studying how different generations – young adults (aged 18–35) and their parents – and gender contribute to domestic work offers important insight into the intergenerational time transfers occurring at different stages of the life course. Demographic research has only started to explore gendered intergenerational exchanges between parents and their young adult children from a time-use perspective (Mencarini et al. 2017). Although earlier studies consider gendered time transfers within families, they tend to focus on selected parts of the life course, such as parents with young children (Wight et al. 2009; Cordero-Coma and Esping-Andersen 2018) or adult children and their aging parents (Albertini, Kohli, and Vogel 2007). Prior studies on domestic time use also omit many Eastern European countries (e.g., Hook 2010; Altintas and Sullivan 2016; Anxo et al. 2011; Mencarini et al. 2017) and rarely, if at all, include Estonia (cf. Mencarini and Sironi 2012).

Therefore, to the best of my knowledge, this study is the first to examine intergenerational time transfers in Estonia, using time-use diary data and considering gender differences in domestic time use across distinct life-course stages. Specifically, I address two research questions: How are gendered time transfers structured in the parental home, from young adults to their parents and from parents to their (adult) children? And how are gendered time transfers structured across different life-course stages?

Two aspects of this descriptive study set-up warrant more explanation. First, gender plays a central role in our understanding of domestic time allocation and intergenerational time exchanges within households (e.g., Bianchi and Milkie 2010; Hook 2010). It is one of the strongest direct predictors of household members' absolute and relative input to domestic work, division of housework, and specialization in household tasks, and holds true across different country contexts (Altintas and Sullivan 2016; Anxo et al. 2011; Moreno-Colom 2017). Yet gender is also interwoven with expectations about time use and responsibilities accompanying family and household transitions, structuring time allocation across the life course (Anxo et al. 2011; Mencarini et al. 2017).

Second, Estonia is an intriguing study setting because it has specific structural features, compared to other countries included in prior research (i.e., France and Italy.

Mencarini et al. 2017), that could manifest in a distinct country pattern of intergenerational time transfers: Estonia represents a post-communist welfare regime, where state protection in many domains is more retrenched than in Western European countries, but where the conditions for work–family balance and adequate financial and institutional family care support are still reasonably favorable (Frejka et al. 2016). Female labor force participation has traditionally been high in Estonia (71% in 2010), with only a low proportion of women being employed part-time (13% in 2010) (Eurostat 2020a; 2020b). In the last 20 years the female gross enrollment ratio in tertiary education has also been higher than in France and Italy (68% versus 55% and 66% in 2010, respectively) (World Bank 2020). However, this has not led to high levels of gender symmetry in unpaid domestic and care work, which is still largely done by women (Statistics Estonia 2020). Furthermore, the proportion of owner-occupied households is high in Estonia (86%) and the mortgage market is relatively underdeveloped (Eurostat 2020c; European Mortgage Federation 2010; Mulder and Billari 2010). This makes independent household formation more difficult for young people – compared to France, but not to Italy – and is also reflected in the high share of households living in crowded conditions (Eurostat 2020d).

Given the idiosyncratic combination of a fairly egalitarian context and persistent gender inequality in domestic work in Estonia, intergenerational time transfers could either be less or more gendered than in France or Italy. I will explore this issue descriptively and complement and contrast findings from France and Italy (Mencarini et al. 2017) with insights from Estonia. My descriptive exercise will thus allow for a better cross-national evaluation of intergenerational time transfers in Europe.

## **2. Data, variables, and method**

I use the most recent Estonian time-use survey data (2009–2010;  $N = 9,946$  person days) conducted by Statistics Estonia, which provides sociodemographic information on both households and respondents and collects time diaries for all household members aged 10 and older. Time diaries record all activities in 10-min intervals in a 24-hour period on two randomly assigned days (weekday or weekend) and were collected over a 52-week period with a response rate of 45.3%, which is low but typical for time-use surveys. The data are based on a nonproportional stratified sample of “address persons” – respondents aged 18 and older as of 1 January 2009 – drawn from the Estonian Population Register. The selected address person brought their household to the survey (Statistics Estonia 2011). To account for selection, nonresponse bias, and diary day, sample weights were applied to provide robust nationally representative estimates. Following the methodology applied by Mencarini et al. (2017), I select three sub-samples from the full data set: (1)

young adults living with at least two parents in the parental home ( $N_{S1} = 772$  person days); (2) parental couples aged 40–65 with or without (adult) children in the household ( $N_{S2} = 1,348$  person days); (3) young adults in one of the following family living arrangements: With parents, Single, Childless couple, Couple with child (ren), and Other ( $N_{S3} = 2,481$  person days). Other is the residual category for living with one parent, single parents, and sharing with non-relatives.

The two dependent variables are the time spent on domestic activities in minutes and the relative share among all domestic work in the household. They are based on domestic activities such as cleaning, cooking, dish washing, food shopping, gardening, maintenance, and care activities of all types (i.e., childcare, adult care, and care for pets) and are calculated from the ETUS time diary for main and second activities. (Importantly, how much time is devoted to domestic work can be affected by unobserved factors such as a higher preference for cleanliness, and the share of time spent on domestic work (relative to the total time spent on domestic work in the household) is more likely to capture equality aspects in intergenerational time transfers (Greenstein 2000: 4)). Both measures are utilized in Ordinary Least Squares' (OLS) regression models, which are run separately for men and women. Because diary days are nested in persons, who in turn are nested in households, I apply clustered standard errors. All models control for age and age squared, educational level (low (ref), medium, high), employment status (student, unemployed, employed (ref)), number of children (younger than 18 years old) in the household, number of adults (over 18 years old) in the household, number of rooms in the household, whether or not the household has a garden, and whether or not the household is urban. I also use equivalized household income deciles (1 (ref)) to control for wealthier households' ability to outsource domestic tasks, because ETUS does not include information on the actual use of paid domestic services. Additionally, I add the following specific controls to analyses pertaining to the different analytic samples: (1) sex composition of the siblings in the household (only brothers for men, only sisters for women), mother's employment status (not employed (ref), employed), mother's level of education (low (ref), medium, high); (2) partner's age, education (low (ref), medium, high), and employment status (not employed (ref), employed), and number of young adults (aged 18–35) and number of additional adults (older than 35) in the household.

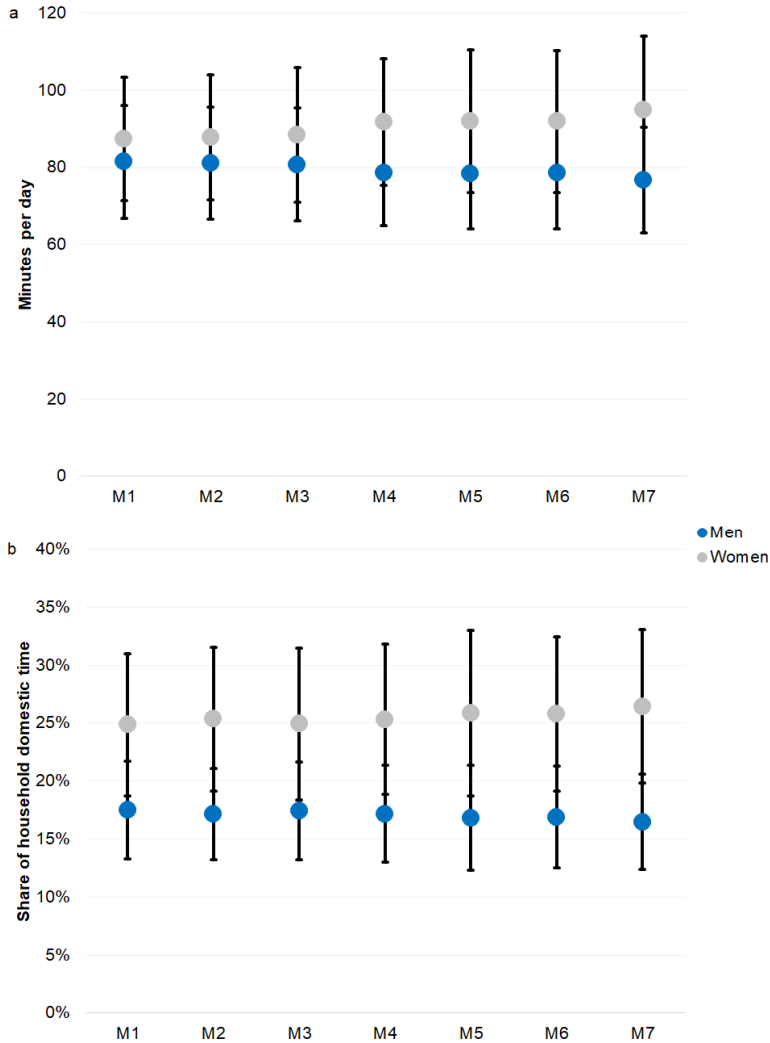
A common methodological issue with time-use data is non-normality because some respondents do not participate in domestic activities at all (i.e., they contribute 0 minutes on both days). Tobit regression is therefore sometimes used (Mencarini et al. 2017), but has also been criticized, especially when the zeros reflect real behavior rather than censoring. OLS regression modeling has been shown to be a suitable technique for time-use data, providing more robust estimates than Tobit models (Stewart 2013). Alternative Tobit regression analyses and fractional logit models (available upon request) show generally comparable patterns to those presented in this paper.

### **3. Results**

Figure 1 addresses the first part of the first research question: How are gendered time transfers – from young adults to their parents – structured in the parental home? Most relevant for young adults' participation in domestic tasks are their own employment status and the dwelling characteristics (as indicated by the stepwise addition of control variables M4 and M7). This result is supported by (1) sequential OLS regression models separately estimated for men and women, to assess if, due to selection, control variables have different effects by gender, and (2) pooled OLS regression models for different types of activity (i.e., 'everyday housework', 'occasional housework', and 'care activities', following Moreno-Colom 2017), to assess if control variables have different effects by type of activity. (Additional analyses' results are available upon request). Moreover, when living in the parental home, young women do more domestic tasks than young men both in absolute and relative time spent. Specifically and once other variables are controlled for, women spend about 18 minutes more per day on domestic duties and account for a 10% higher share of household domestic time than men (Figure 1; M7). Together, this suggests that irrespective of housework activity type, young adults' (absolute and relative) participation in domestic tasks is highly gendered and largely driven by their own time availability (i.e., being a student or unemployed) and whether or not the household has a garden.

Table 1 addresses the second part of the first research question: How are gendered time transfers – from parents to their (adult) children – structured in the parental home? Having young adults at home reduces the relative domestic workload for mothers, suggesting that adult children may take over part of their mother's share in performing domestic tasks. Both mothers and fathers also benefit from additional adult persons residing in the household (in terms of a decrease in the relative share). While mothers benefit more than fathers from absolute and relative time exchanges (from both young adult and adult household members), this is against the backdrop of mothers also contributing more absolute and relative time to domestic work: On average, women contribute 85 minutes more absolute time than men, or 23% more of the relative share of domestic work (Table 1). In all, the results suggest that intergenerational time exchanges in the parental home are characterized by women's greater time commitment: Mothers perform the majority of household work; they are supported by adult children taking on some of the domestic workload, but also in the younger generation (absolute and relative) time transfers are higher among daughters than sons.

**Figure 1: Young adults' absolute and relative participation in domestic work when living with parents (average marginal effects; pooled models for men and women)**



Note: N = 772 person days. M1 = sex only; M2 = + age and age squared; M3 = + education; M4 = + employment status; M5 = + sibling size and household composition; M6 = + mother's characteristics; M7 = + dwelling characteristics. Black bars indicate 95% confidence intervals.

Source: ETUS (2009–2010). Own calculations (sample weights applied).



**Table 1: Parents' absolute and relative participation in domestic work (parameter estimates; separate models for men and women)**

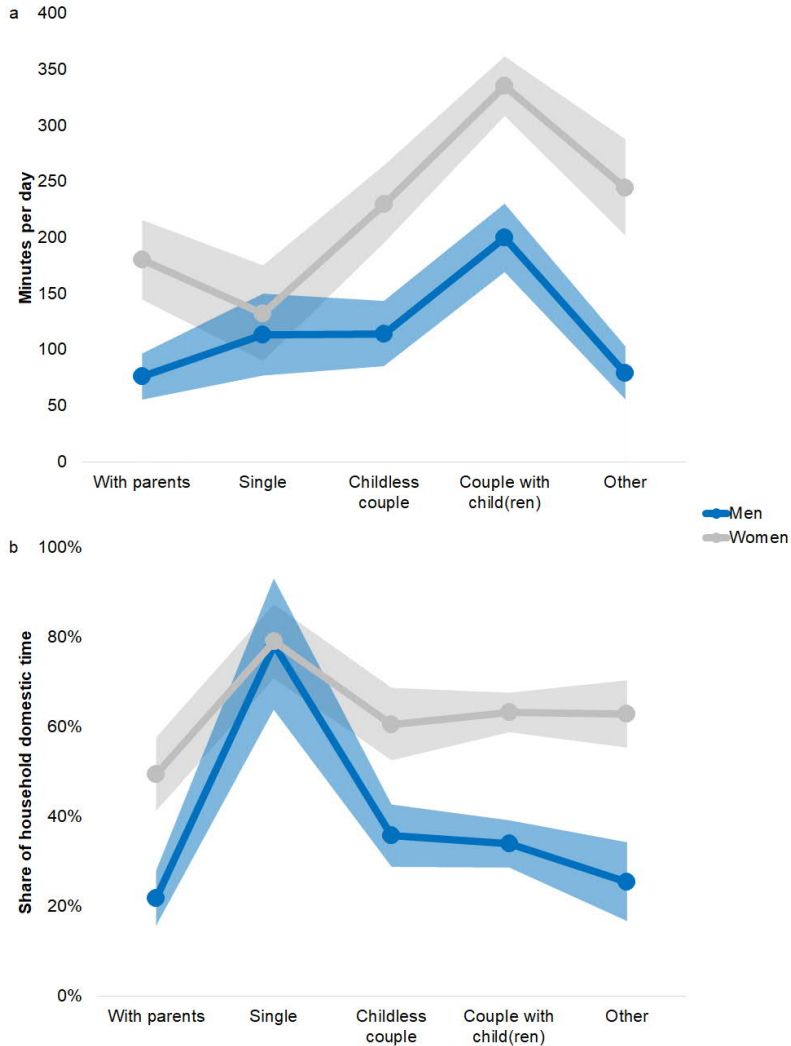
	Men					
	Minutes per day			Share of household domestic time		
	b	SE	(95% CI)	b	SE	(95% CI)
Number of child(ren) <18	5.26	9.85	(-14.09, 24.60)	-0.78	1.71	(-4.14, 2.58)
Number of young adults	0.96	7.92	(-14.58, 16.51)	-2.40	1.42	(-5.18, 0.38)
Number of adults †	-20.98	13.26	(-47.03, 5.07)	-7.63	2.07	(-11.70, -3.57)
Constant	250.43	88.35	(76.90, 423.96)	18.51	14.83	(-10.62, 47.63)
N person days		1,174			1,174	
R <sup>2</sup>		0.15			0.13	
Predicted value††	183.90		(170.96, 196.81)	33.00		(30.82, 35.18)
	Women					
	Minutes per day			Share of household domestic time		
	b	SE	(95% CI)	b	SE	(95% CI)
Number of child(ren) <18	16.86	12.07	(-6.84, 40.57)	-2.68	1.77	(-6.16, 0.80)
Number of young adults	-23.39	8.54	(-40.17, -6.62)	-9.37	1.40	(-12.11, -6.62)
Number of adults †	-1.81	17.61	(-36.39, 32.77)	-9.20	2.34	(-13.79, -4.61)
Constant	338.64	82.79	(176.04, 501.23)	67.13	13.50	(40.63, 93.64)
N person days		1,174			1,174	
R <sup>2</sup>		0.15			0.21	
Predicted value††	268.59		(255.71, 281.46)	55.66		(53.55, 57.77)

Note: Models control for age, partner's age, employment status, partner's employment status, education, partner's education, number of rooms, has a garden, urban, and equivalized household income decile. † Number of adults is adjusted for the parental couple and any young adults (18–35) who are present in the household, counting additional adult household members (older than 35). †† Adjusted mean value when all variables are held at the mean.

Source: ETUS (2009–2010). Own calculations (sample weights applied).

Figure 2 addresses the second research question: How are gendered time transfers structured across different life-course stages? All else being equal, young Estonians out of the parental home (i.e., Single, Childless couple, Couple with child (ren), and Other) generally spend more (absolute and relative) time doing tasks than coresident young adults, suggesting that the transition to adulthood implies time costs for young men and women (Figure 2, panel a and b). A notable exception to this pattern concerns single young women, who spend about 48 minutes less per day compared to those living with parents and for whom leaving the parental home thus implies time benefits (Figure 2, panel a). Gender differences in absolute domestic time use are also the smallest among single young men and women, at about 19 minutes per day. The main gender gap in domestic time allocation comes with partnership formation: Among young childless couples, women spend almost 2 hours a day more on domestic tasks than men (Figure 2, panel a). This gap only increases moderately once children appear: Among couples with children, women allocate about 2 hours and 15 minutes more to housework than men in the same situation. The differences in absolute and relative domestic time use extend into what is labeled 'Other', but likely represent differences in the category composition by gender (75% of young men in this category are actually living with one parent only, whereas 73% of young women in this category are single parents).

**Figure 2: Young adults' absolute and relative participation in domestic work by family situation (average marginal effects; separate models for men and women)**



Note:  $N_{Men} = 1,219$  person days;  $N_{Women} = 1,262$  person days. Both models shown in panels a and b control for age, age squared, education, employment status, number of rooms, has a garden, urban, and equalized household income deciles. The lighter colored bands show 95% confidence intervals. Source: ETUS (2009–2010). Own calculations (sample weights applied).

## 4. Summary and discussion

Similar to France and Italy (Mencarini et al. 2017), young women in Estonia, when living in the parental home, contribute more to household tasks than young men and benefit less from intergenerational transfers of domestic time from their parents. The gender inequality in domestic time use among young adults is further highlighted by the decrease in absolute domestic time for young Estonian single women versus the opposing increase for young single men – suggesting that unlike in France and Italy, leaving home in Estonia to live alone comes with time benefits for young women but time costs for young men.

From the vantage point of parental couples, having children at home comes with an increased domestic workload. Nevertheless, it is mothers who contribute more (absolute and relative) time to domestic activities; fathers' contribution to domestic work is noticeably smaller. Mothers, in turn, also benefit from time transfers from their young adult children in the household, but the upward intergenerational time transfers mainly correlate with young adults' own time availability.

It is clear, and consistent with prior research (Mencarini et al. 2017), that gender inequality in domestic time use is a general pattern across the life course in Estonia. However, two distinctive features of domestic time allocation over the life course in Estonia are noteworthy: Inequality in domestic time use between young men and women is quite pronounced early on in the life course (as indicated by women's incurred time benefits upon leaving home to live alone), and partnership formation (rather than the birth of children) correlates with a widening of the domestic time-use gap between men and women. This suggests a fair degree of gender differentiation in the family domain, where living together with anyone else (i.e., partner, child, or other family member) is generally time-intensive for women, presumably because of cultural expectations regarding women's contribution to housework.

Gendered intergenerational time transfers in Estonia thus are more similar to those in Italy than in France, insofar that there is marked gender asymmetry in domestic time use, although not of the same magnitude and with a different life-course dynamic. High female employment and tertiary education rates are generally thought to be associated with attenuated gendered practices at home, but as Yu and Lee (2013) note, gender differentiation in the private sphere can be concomitant with gender equality in the public sphere. A tentative explanation then could be that multi-dimensional cultural ideas regarding the division of paid and unpaid work coexist in Estonia, promoting gender equality in the work domain and gender inequality in the family domain. Future research should formally test the relevance of multi-dimensional cultural influences to cross-national patterns in intergenerational time transfers.

By applying both absolute and relative measures of time spent on domestic activities, this descriptive finding (1) better captures equality aspects in gendered intergenerational time transfers than prior research and (2) highlights the nuanced ways in which intergenerational time exchanges are gendered across countries. Nonetheless, a limitation should be noted: By essentially comparing increments in time across life-course stages – because ETUS is a cross-sectional survey and the same individuals and their time use cannot be observed longitudinally – I cannot fully account for unobserved heterogeneity (e.g., unobserved factors at the individual and household level that correlate with domestic time allocation), which may bias the findings in this study. Therefore, broader conclusions about gendered intergenerational time transfers across distinct life-course stages require further unraveling of causal links in time use.

## **5. Acknowledgements**

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