**Housework time within family households:
Mothers', fathers', and siblings' contributions**

Florian Schulz^{*}

April 2020

Paper presented at the Annual Conference of the Population Association of America,
April 23, 2020, Washington, D.C., online meeting.

Update: March 2021

The final version of this preprint has been accepted for publication in the
Journal of Marriage and Family: <https://doi.org/10.1111/jomf.12762>.

^{*} <https://orcid.org/0000-0002-3865-6668>; florian.schulz@ifb.uni-bamberg.de

Objective: *To investigate time use of housework for all members of shared family households with a special focus on how time allocation varied by siblings' sex-composition.*

Background: *Two knowledge gaps were addressed: first, young people's contribution to housework, since studying children in their primary socialization environment adds to the understanding of the foundations of gender inequality in unpaid work times over the life course and in society; second, the allocation of housework time between all family members, as there is yet no study that includes every household member in the analysis of housework time allocation within family households.*

Methods: *1,263 four-person-households were sampled from the German Time Use Study (pooled data from 1991/1992, 2001/2002 and 2012/2013). Using information from 13,525 time diaries, the absolute and relative time use for several housework activities was analyzed for weekdays and weekends by siblings' sex-composition, applying linear regression.*

Results: *Mothers and daughters spent more time for housework and routine chores than fathers and sons in shared family households. Total housework time was lowest in households with two sons and highest in households with two daughters. In households with opposite-sex siblings, daughters and sons performed a division of housework that closely resembled the traditional model of gender inequality.*

Conclusion: *Even in times of gender convergence, traditional housework behavior is transmitted from parents to their children.*

Key Words: *time use, household allocation, children, gender, Germany, sex composition.*

For decades, gender inequality and gender construction have been a constant topic in family research. In these discussions, the division of housework in families has prominently figured as one of the most promising applications for the study of female and male behavior and its interplay in the household and in society. Comprehensive research has documented extensive and profound knowledge of the gender-specific division of labor as well as the causes and consequences of this phenomenon in Western societies (Coltrane, 2000; Lachance-Grzela & Bouchard, 2010).

There are two related knowledge gaps within this otherwise vast stream of literature on housework issues, which this paper seeks to address. First, compared with adult women's, men's and couples' housework patterns, far less is known about the early stages of the life course covering young people's participation in housework (Cordero-Coma & Esping-Andersen, 2018; Larson & Verma, 1999). Second, even less is known about the household allocation of housework time between more than two individuals (Craig & Powell, 2018; Craig, Powell, & Brown, 2015; Manke, Seery, Crouter, & McHale, 1994), i.e., so far, there is no study that includes every household member in the analysis of housework time allocation within family households.

Addressing both of these knowledge gaps contributes to our understanding of housework inequality, because, first, children not only cause housework (as it is usually assumed in research on adults' housework performance), but they themselves also do housework (Gager, Cooney & Call, 1999; Larson & Verma, 1999) and are thus relevant actors in the process of home production. Second, research has identified the family as a crucial context for young people's gender development and household productivity (Crouter, Manke, & McHale, 1995; McHale, Crouter, & Tucker, 1999). Therefore, studying children in their primary socialization environments adds to our understanding of the foundations of the gender division of housework among adults (Cordero-Coma & Esping-Andersen, 2018). This is, because parents' and children's life courses are inherently linked to each other, mutually

influencing their time binds, their flexibility in every-day life and their work-life balance. In addition, this is further, because children are connected with their siblings, and the sibling configuration has been found to be associated with gender-specific housework behavior of girls and boys (Blair, 1992b; Goldscheider & Waite, 1991) as well as with parental sex-typing of children's housework activities (Brody & Steelman, 1985).

Using large-scale time use data from Germany, the present study contributes to the large corpus of literature in four ways. First, it presents new data on children's and adolescents' contributions to housework, complementing the existing literature on other Western countries, such as Australia (Craig & Powell, 2018; Craig, Powell, & Brown, 2015) or the United States (Blair 1992a, 1992b; Crouter, Head, Bumpus, & McHale, 2001; Manke, Seery, Crouter, & McHale, 1994). Second, the present study aims to shed light on the allocation of housework time between all members of family households. Applying a rigorous household design by sampling only four-person households (two heterosexual parents and two children), the study assesses the absolute and relative time use of fathers, mothers and two children within shared households. Third, drawing on the literature on fraternal influences on children's behavior (McHale, Crouter, & Tucker, 1999; McHale, Uptegraff, & Whiteman, 2012; Steelman, Powell, Werum, & Carter, 2002), the present study examines how housework time and its division between all family members vary by the sex composition of children. To date, there is no study but the German Time Use Study which includes first-hand information of all household members, which is necessary for this kind of differentiation. Fourth, the present study presents a broader set of relevant outcomes than previous studies, including absolute and relative time use for total housework, and different routine and non-routine chores, as well as for weekdays and weekends.

BACKGROUND

Gender Inequality in Housework

Countless studies have documented that women are involved much more than men in unpaid labor and especially in housework. This applies in particular the German context of the present study, as Germany is at least considered a modified male breadwinner society with prevailing traditional gender ideologies and gender-specific behavior in the family. Even though Germany has gone through remarkable changes in gendered time use patterns (Altintas & Sullivan, 2016; Leopold, Skopek, & Schulz, 2018) and gender role attitudes (Braun & Scott, 2009) over decades and cohorts, women still take the lion's share of unpaid work and are generally held responsible for this kind of labor. This notion of separate spheres is also reflected in a gender-typed task segregation of housework, as women are more strongly attached to routine housework, such as cooking, cleaning and doing the laundry, while men refrain from these activities and are more inclined to carry out non-routine chores, such as repairs or administrative paperwork (Blair, 1992a; Goldscheider & Waite, 1991).

Research on children and adolescents found essentially the same patterns of gender inequality: Lee, Schneider and Waite (2003) summarized the literature for the United States and concluded (1) that girls contribute to housework chores to a much greater extent than boys; (2) that girls – just like adult women – spend more time on routine housework than boys, and that boys – just like adult men – spend more time on non-routine chores than girls; and (3) that both gender gaps are already present in very young children and even more pronounced for adolescents. Research on other countries than the United States, i.e., Denmark (Bonke, 2010), Italy (Dotti Sani, 2016), or Germany (Wirth, 2017; Schulz, 2019), supported these findings.

Previous Studies on the Household Allocation of Housework Time

Previous studies that focused on housework time of parents and children in shared family households (Blair, 1992a; Manke, Seery, Crouter, & McHale, 1994; Goldscheider & Waite, 1991) have highlighted the importance of “conceptualizing the family economy as three-cornered – involving mothers, fathers, and children” (Manke, Seery, Crouter, & McHale, 1994: 667). Craig and Powell (2018) were the first to use large-scale time use data to examine the relative housework contributions of co-resident parents and young people. They found that mothers are the primary agents of domestic labor, all the more so when it comes to routine chores and the work for the household. Together with fathers’ comparatively small contribution, the time spent by parents far outweighs that of their children, indicating that children play a rather additive role within the family economy. However, children were found to perform slightly more housework for themselves than for the household. These findings are in line with those of Craig, Powell and Brown (2015), who concluded that young peoples’ time spent for housework does not make up for parents’ time on the same chores, suggesting that the households’ total housework time is higher the more the children do.

Concerning the variations of time use along “the rhythmic structure of the week” (Manke, Seery, Crouter, & McHale, 1994: 658), previous research did not suggest any substantial deviations from the basic pattern of gender inequality in housework time. Mainly due to different time constraints and flexibilities (Hook, 2017), women, men, and children were found to do more housework on weekends than on weekdays (Manke, Seery, Crouter, & McHale, 1994; Stratton, 2012). However, this does neither result in a fundamental change of relative contributions of time, nor in a change of task segregation.

Theoretical Considerations

In theoretical terms, it has been argued that processes of gender construction, specialization, and intra-family bargaining still perpetuate gendered patterns of adult women's and men's time use along the traditional lines of separate spheres, even despite developments in gender convergence, attitudinal change, and the increasing human capital investments and bargaining power of women (Coltrane, 2000; Lachance-Grzela & Bouchard, 2010). The gender construction approach emphasizes the importance of symbolic exchange for the division of labor in the household (Berk, 1985; West & Zimmerman, 1987). In the context of housework, "doing gender" refers to the performance of specific activities that confirm traditional female or male identities and is seen as an important factor of women's and men's time allocation, and is largely independent of other processes, such as relative productivities or labor market arrangements. As housework can still be regarded as an essential component of women's doing gender, women are more attached to housework than men, and this difference is most pronounced in mid-adulthood (for Germany: Leopold, Skopek, & Schulz, 2018), especially in the case of parenthood (for Germany: Kühhirt, 2012). Although highlighting different mechanisms, the predicted empirical outcome of this concept is consistent with gender-neutral bargaining or economic specialization models, such as Becker's model (1991), which assume higher domestic productivity of women compared to men or use resource exchange or dependency mechanisms to explain traditional patterns of housework sharing.

Another aspect of the gender construction approach emphasizes that housework comprises different and gendered housework activities. For the general distinction between routine (such as cooking, cleaning or doing the laundry) and non-routine chores (such as doing repairs or caring for the car), it has been argued that women's doing gender is more closely linked to routine housework, while men refrain from these activities to avoid dissonance in their gender identity (Berk, 1985; Goldscheider & Waite, 1991).

Most explanations for children's contributions to housework have been framed in terms of "need or socialization" (Blair, 1992a; Bonke, 2010; Cordero-Coma and Esping-Andersen, 2018). The demand approach argues that children have to do housework because of parental time constraints, for example because of maternal employment. The socialization perspective postulates that parents transmit patterns of housework work to their children while they live together in a shared household. When girls and boys grow up, they develop a sense of gender roles and gender-appropriate behavior by observing and imitating their parents who more or less consciously act as role models or may tend to rather actively sex-type children's household labor (Blair, 1992b; Cordero-Coma & Esping-Andersen, 2018). This is particularly true in the case of housework, since the intra-household time allocation between women and men is still an important reference of doing and displaying gender in modern societies. Altogether, the socialization approach has received considerable empirical support, especially in the longitudinal literature on children's housework performance (Cordero-Coma & Esping-Andersen, 2018; Cunningham, 2001; Gupta, 2006), as it was found that parents' and children's housework times are positively correlated in general and that this observation is more pronounced among same-sex parent-child-dyads.

A broader view of the family as the main socialization environment for children's housework participation must necessarily include siblings, especially with a focus on the sex composition of children (Steelman, Powell, Werum, & Carter, 2002). This is, first, because children draw learning experiences in direct everyday interactions from their same-sex or opposite-sex siblings, just as they do from their same-sex and opposite-sex parents (McHale, Crouter, & Tucker, 1999). Second, "[s]iblings also indirectly influence each other by virtue of their impact on the roles and relationship dynamics of the larger family system" (McHale, Crouter, & Whiteman, 2003: 140). The latter may in particular lead to parental sex-typing of children's housework contributions under certain conditions (Blair, 1992b; Brody & Steelman, 1985; Crouter, Head, Bumpus, & McHale, 2001).

Given the persistence of the traditional separate spheres model, both mechanisms – social learning and sex-typing – are expected to contribute to the reproduction of gendered housework performances among children. However, empirical research on the influence of sibling composition on housework behavior has been rare and not entirely conclusive (Cordero-Coma & Esping-Andersen, 2018; McHale, Crouter, & Whiteman, 2003). Nevertheless, there is some evidence of “gender-differential socialization” when parents follow a traditional model and children have siblings of the opposite sex (Crouter, Manke, & McHale, 1995). McHale, Crouter and Tucker (1999) stated that younger sisters of older brothers are more involved in housework in families with traditional fathers, but also that younger boys behaved similarly in the same contexts. Furthermore, Crouter, Head, Bumpus and McHale (2001) documented the strongest patterns of traditional housework division in families with older girl/younger boy dyads and mothers with high work demands. In families where fathers are confronted with high work demands, older brothers were found to spend more time on chores than their younger sisters.

Hypotheses

The present study was designed to describe the allocation of housework time between all members of four-person households based on the theoretical basis outlined above. The empirical analysis of German time use data is guided by the following hypotheses, which combine expectations from theory and previous literature to draw a picture of absolute and relative time use in shared family households.

Based on the gender construction approach and the sheer bulk of previous literature on parents’, but also on children’s housework time, I expect that women (mothers and daughters) spend considerably more time on housework and all routine chores than men (fathers and sons), and that men spend more time on non-routine chores than women. Following Craig and Powell’s (2018) study, I assume that parents do most of the necessary housework. Therefore,

parents' housework time should be independent of the sex-composition of their offspring and, thus, differences in total housework time between households are induced by children's contributions. According to this, total housework time should be lowest in households with two sons and highest in households with two daughters.

The patterns of absolute time use logically transform into relative proportions of mothers, fathers, sons and daughters within family households. Overall, mothers' shares of housework time are expected to be by far the highest, and fathers' shares are expected to be comparably low. Empirical results will show how the fathers' shares compare to those of their children: if gender construction exceeds the generally greater participation of parents in housework, daughters' shares should be higher than those of their fathers. As total housework time is expected to be highest in households with two daughters, mothers' shares are likely to be lowest in these households and highest in households with two sons. While these expectations should apply to total housework and all routine chores, fathers' and sons' shares should considerably exceed mothers' and daughters' shares in non-routine housework time.

On the question of how siblings share housework, I expect same-sex siblings to share children's total time devoted to housework fairly evenly, because there is no gender criterion which may decide in favor of a division along the lines of separate spheres. In families with opposite-sex siblings, I expect daughters to have the larger share compared to their brothers. Again, these expectations apply to total and routine housework, but not to non-routine chores, where it should be the other way around.

Given the empirical evidence for housework time on weekends (Hook, 2017; Manke, Seery, Crouter, & McHale, 1994; Stratton, 2012), I expect men and children of both sexes to report at least slightly higher time budgets. However, this should not change the overall gendered picture outlined for housework activities on weekdays and the expected patterns of the sex-composition of siblings.

METHOD

Data and Sample

I used data from the German Time Use Study, which was conducted in 1991/1992 (<https://doi.org/10.21242/63911.1992.00.00.3.1.0>; Ehling, 1999), 2001/2002 (<https://doi.org/10.21242/63911.2002.00.00.3.1.0>; Ehling, Holz, & Kahle, 2001), and in 2012/2013 (<https://doi.org/10.21242/63911.2013.00.00.3.1.0>; Maier, 2014), and was provided by the German Research Data Centers of the Statistical Offices of the Federation and the Federal States. The three surveys of the German Time Use Study quota-sampled about 7,200, 5,000 and again 5,000 households, respectively, to portray the German population for all days of the week and all months of the year. Compared to a (hypothetical) random sample, households with children in particular were oversampled, so that sufficient case numbers are guaranteed for the analyses of this study

Time use data were collected using a diary approach, accompanied by separate questionnaires for each respondent and each household. Using time diaries is regarded as a valid approach to capturing time use patterns (Gershuny, Harms, Doherty, Thomas, Milton, Kelly, & Foster, 2019), even superior compared to other methods, such as stylized survey questions on time use (Kan & Pudney, 2008), especially when children are the target population (Ben-Arieh & Ofir, 2002).

In 1991/1992, each member of a household aged 12 years or older kept a diary for two successive days, recording all activities at 5-minute intervals. In 2001/2002 and in 2012/2013, each household member aged 10 years or older kept a diary for two weekdays and one weekend day, recording all activities at 10-minute intervals. The openly recorded activities were subsequently coded according to the 2008 Guidelines for Harmonized European Time Use Surveys (Ehling, Holz, & Kahle 2001; Maier 2014).

In the present study, I deliberately chose a narrow definition of family households, each consisting of two heterosexual parents, both aged 60 or younger, and two children aged

10–25, without further restrictions. The final sample comprised 1,263 households.

Information on time use was derived from a total of 13,525 time diaries of all household members.

This data and sample offer three main advantages for the purpose of the present study. First, the German Time Use Study contains first-hand information on all household members, i.e., parents and children, which is a great advantage as reporting the time use of others but oneself has been found to be prone to errors (Kamo, 2000). Second, the data provide very detailed time use information for weekdays and weekends as well as for more specific bundles of tasks than total housework, i.e. routine and non-routine housework. Third, sampling four-person households leads both to a rigorous reduction in heterogeneity and to a clear identification of each position within the household – mother, father, older and younger child – and their respective roles in the allocation process of housework time. This sampling is advantageous compared to previous studies, where more children were included than were actually analyzed or where all of the children's contributions to household work were combined into an aggregate measure of offspring support (Blair, 1992a; Craig & Powell, 2018; Craig, Powell, & Brown, 2015; Manke, Seery, Crouter, & McHale, 1994).

Outcome Measures

This study analyzed the absolute and relative contributions of all members of family households to housework. All measures were derived from time use data, which were obtained as first-hand diary information of fathers, mothers and children in shared households. A first set of outcomes included fathers', mothers', elder and younger child's time use for different housework activities in minutes per day. Parents', children's, and households' total time budgets for housework activities were calculated as the sum of the respective household members.

Six different sets of housework activities were analyzed: total housework (sum of all subordinate activity), activities in the kitchen (cooking and dishes), cleaning and laundry, grocery shopping, all routine housework, as well as repairs, car maintenance and doing administrative paperwork (“non-routine” chores). The time budgets for all activities included primary and secondary activities; diary slots for which more than one activity of a specific set was recorded were counted only once.

A second set of outcomes focused on how total housework time for each set of housework activities was divided between all four household members. Thus, fathers’, mothers’, and each child’s time was divided by the total time of the household for each set of activities. Compared to previous studies, the time of all children in a household was not collapsed in this study, but each child was treated as a separate unit of analysis.

A third outcome was the division of children’s total time between the two children of each household. This variable was measured only for the older child by dividing his or her time budget by the children’s total time budget for each activity. This share was calculated for households in which both children reported positive time budgets for housework, i.e., households in which both children did not report any time for housework were excluded; including these households in the analysis, assuming that each child performed 50 percent, did not change the results.

All times and shares were calculated separately for weekdays (Mondays through Fridays) and weekend days (Saturdays and Sundays), because it is plausible to assume that housework time is not distributed evenly over the week. Basically, the associations found in this study for weekdays and weekend days were similar, although lower case numbers for weekend analyses yielded larger confidence intervals.

Since the German Time Use Study used different time slots for its diaries (5-minute intervals in 1992/1992 and 10-minute-intervals in 2001/2002 and in 2012/2013), each episode of housework activity in 1991/1992 was rounded down to the nearest ten. Thus, absolute time

budgets in 1991/1992 are smaller and less precise; this transformation, however, has not influenced the conclusions of the present study. Despite the differences between the first and the two succeeding surveys, including the survey from 1991/1992 increased the case numbers for the estimations and extended the observation period from 10 to twenty years.

Variables

The main independent variable in this study was the sex composition of children in the household, which, as research has shown, is associated with variations in housework participation. It was captured by four dummy variables: two boys, older boy and younger girl, older girl and younger boy, two girls. The older of the siblings was always listed first. In cases of same age, one of the two children was randomly assigned to be the older child.

All models included controls known to be associated with variations in housework time (Table 1): parents' employment situation (both full-time, father full-time and mother part-time, father full-time and mother not working, father not full-time; same as in Craig & Powell, 2018); number of children working (0, 1, 2); university degree of parents in the household (yes/no); region (East/West Germany); age of the older child (of which 10 is subtracted to rescale the variable to 0–15); age difference between older and younger child (in years between 0–15); and survey year (1991/1992, 2001/2002, 2012/2013). The models used to estimate the proportions also included the total time spent by households on housework or the total time spent by children on housework, both divided by 100.

--- Table 1 ---

Plan of the Analyses

Since fathers, mothers and children in the German time Use Study did not necessarily keep their diaries on the same days, the available diary data were arranged as one record for each household, comprising mean time budgets for housework activities of all household members, separately for weekdays and weekends. Households were only included in the estimations if all members recorded valid time use information for weekdays or weekends, resulting in different estimation samples for each part of the week (Table 1).

Both the absolute time use and the relative shares of housework time were estimated using OLS regression models, separately for each household member or groups of household members, each set of activities, and for weekday and weekends (Tables S3-S14 in the supplement to this article). From these models, the predicted minutes per day and the predicted shares were calculated as margins at the means (Williams, 2012), which were adjusted by setting all covariates to the sample means (Tables S1, S2 in the supplement to this article).

The analyses were subject to several sensitivity analyses: first, tobit models for absolute time use and general linear models with logit link-functions for shares were estimated. Second, seemingly unrelated regression was applied to explicitly take into the positive associations between the time budgets of parents and children, as known from previous studies on Germany (Wirth, 2017; Schulz, 2019). Third, all models were estimated separately for each survey year, and for the two most recent years only (1991/1992 excluded). The associations between the regressors and the outcomes were very similar in each survey, although much lower case numbers yielded larger confidence intervals that did not necessarily reproduce each statistically significant coefficient. Fourth, the analyses were run on different samples (e.g., for different age ranges of parents and children). Fifth, other sets of housework activities were selected and only primary activities were used. None of these sensitivity checks changed the overall picture to any notable extent.

RESULTS

Time Use for Housework

Figure 1, plotted from columns 1, 2, 4, 5 of Tables S1, S2 in the supplement to this article, shows the results for the absolute time use for housework of all four members of the sampled shared family households for weekdays (left column) and weekends (right column) by the sex composition of the two children. As expected, mothers' time budgets for total housework and routine chores were by far the highest, regardless of their husbands and their children. For example, mothers spent an average of 212 and 220 minutes per normal weekday on total housework, which is about 3.5 times the time spent by fathers. Fathers spent about 10 to 15 minutes per normal weekday on non-routine chores, i.e., repairs or administrative paperwork, which is considerably more time than any other family member. In sum, parents' time for total housework ranges between 271 and 282 minutes per normal weekday.

--- Figure 1 ---

Again, in line with the expectations, girls spent more time for total housework and routine chores than boys. While older boys devoted about 28 minutes to housework on normal weekdays, their younger sisters spent about 39 minutes, older girls about 48 minutes and their younger brothers about 27 minutes on total housework. In households with two sons, they spent about 26 (older child) and 24 (younger child) minutes per weekday on housework. In households with two daughters, the respective time budgets were about 48 and 43 minutes. In total, both children's time for total housework ranged from 50 to 90 minutes per normal weekday for two sons and two daughters, respectively. Indeed, total housework hours were highest in families with two girly and lowest in families with two boys. This pattern was similar for all single routine chores, although not necessarily significant on the 95% level. Furthermore, in households with two daughters, both girls together children spent 1.5 times more time on housework than their fathers.

At weekends, fathers' time budgets for all chores was about one-third higher than on weekdays, and mothers' time was about 15 percent less for all activities except cooking and dishes (same) and non-routine tasks (slightly higher). Girls time on weekends was at least a third higher than on weekdays, and boys spent about 25 percent more time on total housework. Despite these differences, the general gender pattern at weekends is identical to that of weekdays.

Relative Participation in Housework

Figure 2, plotted from columns 8, 9, 11, 12 of Tables S1, S2 in the supplement to this article, shows the results for relative time use for housework. As expected, mothers' shares of total housework on weekdays were clearly higher than those of other household members, and accounted for about two thirds of total housework in all four household types. Mothers' shares were slightly higher for all routine chores and about 25 percent higher for cooking and dishes and cleaning and laundry. For grocery shopping, mothers' shares were about 50 percent, as fathers and children spent more time on this activity. Fathers' shares were at about 50 percent for non-routine chores, with mothers and children each covering about 25 percent. In households with two daughters, the children's share in total and routine housework activities exceed that of fathers' by about 10 percentage points.

--- Figure 2 ---

At weekends, the picture of housework sharing changed in line with the described changes in absolute housework time. Most notably, mothers' shares in total and routine housework were considerably lower, for example by about 10 percentage points for total housework. For grocery shopping, their shares were even less than 50 percent, because of fathers' higher relative input. Fathers' shares for non-routine housework were about one third higher on weekends than on weekdays. Furthermore, children's and fathers' shares were more

similar on weekends than on weekdays, but still two daughters significantly exceeded their fathers' relative contribution to housework. Overall, children's share in housework in two-daughter households was always higher than children's shares in households with two sons.

Children's Division of Housework

Figure 3, plotted from column 13 of Tables S1, S2 in the supplement to this article, shows how the two children in the sampled households share the total time of children. Shares for older and younger siblings were very similar on weekdays and weekends for each sex composition of the children and for each set of activities.

--- Figure 3 ---

In households with two boys, each child accounted for about 50 percent of children's total housework time. In households with two girls, the older girls' shares were only slightly, but still well over 50 percent, as the 95% confidence intervals did not include the 50 percent threshold for total housework and routine chores. In the latter households, older girls even did about two thirds of the non-routine housework on weekdays and weekends.

In households with children of the opposite sex, the shares of girls were higher than the shares of boys in all activities except for non-routine chores. In households with older girls and younger boys, this pattern was slightly more pronounced. For example, older girls did about 65 percent (compared to their younger brothers' 35 percent) and younger girls did 58.5 percent (compared to their older brothers' 41.5 percent) of total housework. For non-routine chores, it was the older sibling who covered the greater proportion in all households, albeit with large confidence intervals due to lower participation rates and time budgets.

DISCUSSION

Despite long-term changes, the division of housework is still one of the main causes and consequences of gender inequality in modern societies. Traditional social forces and persistent patterns of gender construction continue to reproduce housework mainly as “women’s work”, retaining a now at least moderate separate spheres model as a remarkable societal invariant over decades. This study examined two domains of housework research that have not been sufficiently explored to date: children’s supply of housework, and the allocation of housework time among all members of shared family households. Using data from the German Time Use Study of 1991/1992, 2001/2002 and 2012/2013, it provided the first analysis in which the housework time of mothers, fathers and two children in four-person family households were related to each other. The main independent variable in this study was the sex composition of the two children in the household which research has suggested being an important determinant of children’s housework participation.

Two clear findings surfaced in this analysis. First, although parents and children usually are involved in housework during their normal daily lives, mothers are undoubtedly the main suppliers of housework. Consequently, this study supports the picture that women do the majority of both total as well as routine housework in family households, while fathers and children play a more additive or sometimes substitutive role in the allocation process of domestic labor (Blair, 1992a; Craig & Powell, 2018; Craig, Powell, & Brown, 2015; Manke, Seery, Crouter, & McHale, 1994; Goldscheider & Waite, 1991). Concurrently, fathers covered most of the time for non-routine chores and spent more time for grocery shopping compared to only minor time supply in routine activities, such as cooking, cleaning and laundry. This general and well-documented gendered assessment also applies to children, as daughters were found to devote more time to housework than sons, and also applies to weekends, although with a slightly smaller gender gap.

From a household perspective, this gendered behavior resulted in significantly different total housework times between households with different sex compositions of children. Housework time was highest in households with two daughters and lowest in households with two sons; households with children of the opposite sex were in between. In households with one daughter, but most pronouncedly in households with two daughters, children's total time for housework practically exceeded the fathers' contributions, suggesting that the traditional gender division of housework also applies to the father-daughter dyad.

Regarding the question of how siblings share children's total housework time, the second striking finding of the present study was that same-sex siblings shared their total time fairly evenly, and that opposite-sex siblings practiced a division of labor that basically followed the gendered logic of the traditional gendered sharing model. While there is no gender criterion in brother-sister dyads that may trigger inequality in housework times, sister-brother dyads seem to follow exactly the pattern that the children observe in their parents. This even applies to the cases where the sister is the younger of the two siblings. With this central finding, this study supports the view of the intergenerational transmission of housework behavior from parents to their children, which has been documented in earlier studies (Cordero-Coma & Esping-Andersen, 2018; Dotti Sani, 2016; Schulz, 2019). This, the present study supports the theoretical perspective of gendered socialization and family learning in relation to the sphere of housework and claims that, at the beginning of the millennium, today's families continue to reproduce patterns of gender inequality that may seem outdated from a modern normative perspective.

Despite these new and straightforward results of this study, four issues are left open for discussion and further empirical investigation. First, this study was limited to the German context. Although Germany is an interesting case because of the country's still conservative welfare regime and the associated predominance of traditional gender arrangements, further conclusions on housework allocation in shared households require time use studies from other

countries covering all household members. However, the findings for Germany correspond well with the few existing studies on whole-household allocation of housework from Australia and the United States (Craig & Powell, 2018; Craig, Powell, & Brown, 2015; Manke, Seery, Crouter, & McHale, 1994; Goldscheider & Waite, 1991). Yet, these earlier studies suffered from samples that are not as suitable as the rigorous four-person-family sample of this study, for example because they either combined children's contributions to housework into an overall measure of all children or controlled for other children in analytical models. Compared to this situation, the present study benefited from much less heterogeneity in the households observed.

Second, although the German time Use Study provided data of unrivalled scope for investigating the allocation of housework in families, larger samples would have been necessary to spell out the analyses in more detail. This includes the distinctions between weekdays and weekend days, housework for oneself and for others – as it was done by Craig & Powell, 2018, but was impossible with the data at hand – as well as more fine-grained life-course dependencies of housework behavior. Furthermore, as noted by psychologically inspired studies (McHale, Crouter, & Tucker, 1999), important control variables, such as gender role attitudes, are not included in the German Time Use Study. Knowing more about attitudinal dispositions of parents and children and the associated processes of identity formation would certainly improve our understanding of the interplay of causes and consequences, as well as possible selection processes in the sphere of housework behavior. Further on, this study focused on the classical case of the nuclear family. Including other forms of family life such as single-parent or patchwork households would certainly broaden the picture by including arrangements that might be less prone to the traditional separate spheres model.

Third, this study did not apply a time-related approach, as the three surveys of the German Time Use Study, which cover a period of 20 years, were used as a pooled sample. To

date, there is no longitudinal time diary study available that would be necessary to adequately address the time dependence of empirical developments and theoretical arguments. Yet, several other studies have documented a gender convergence in time use for housework over the centuries for Germany, as for practically all Western societies, both for adults and children (Altintas & Sullivan, 2016; Leopold, Skopek, & Schulz, 2018; Schulz, 2019; Sullivan, Gershuny, & Robinson, 2018). According to these studies, gender convergence has been (and continues to be) largely driven by significant reductions in adult women's time budgets for housework. As Germany, as well as virtually every other modern Western society is in the midst of this slow proceeding process of change (Sullivan, Gershuny, & Robinson, 2018), it is to be expected that total housework times will continue to decline and that women's shares in housework obligations within family households will continue to decrease. Yet, it is theoretically and empirically unclear, how long this process will continue.

Fourth, children's housework participation needs to be embedded in a more general discussion of changes in children's time use. Studies found that children's discretionary time has declined over the years, especially in favor of educational activities (Hofferth, 2009; Wirth, 2017). Concurrent declines in children's housework time, in turn, may well operate in the reverse direction, releasing free time for girls and boys to spare. Contrary, doing in housework may be a learning activity itself, enhancing children's sense of responsibilities when sharing households. In this respect, status differences along the lines of parents' educational attainment are likely to contribute to children's "diverging destinies", depending on parents' choice of parenting style, "concerted cultivation" or "natural growth" (Lareau, 2011; Lee, Schneider, & Waite, 2003). The gender dimension attached to housework might be of particular importance here, as girls and boys are possibly socialized differently because mothers and daughters may be trading off some housework duties in other ways than mothers and sons or fathers and sons. This leads to a further issue, which needs to be fueled with empirical data in the future, namely the question of shared or solo contexts of children's

housework time. The interpretation of daughters' higher time budgets for housework would be different if daughters were doing more time because they do tasks that are being done independently, or if they were doing these tasks together with their parents. Finally, further research should aim at including measures of housework demand in their equations when modeling housework supply, as different demand in housework between daughter-only and son-only families may be a hitherto underestimated and yet unmeasured determinant of time use.

Concluding, this study provided a diagnostic analysis at the beginning of the third millennium that serves as a reference point for future research on observed changes or stabilities in unpaid work times in the wider context of gender convergence. In terms of theoretical reasoning, the study added to the evidence suggesting that children's gender matters in terms of their interaction with their parents, and that it is not just gender identity as an individual-level attribute but rather the dyadic gender compositions of families that need to be considered when explaining the household allocation of housework.

ACKNOWLEDGMENTS

The author declares no conflict of interest. This study was supported by the Bavarian State Ministry of Family, Labor and Social Affairs within the yearly working program of the State Institute for Family Research at the University of Bamberg. The content of this article does not reflect the official opinion of the Bavarian State Ministry of Family, Labor and Social Affairs. Responsibility for the information and views expressed herein lies entirely with the author. Replication files to this article will be made available by the author.

REFERENCES

- Altintas, E. & Sullivan, O. (2016). Fifty years of change updated: Cross-national gender convergence in housework. *Demographic Research*, 35, 455–470.
<https://doi.org/10.4054/DemRes.2016.35.16>
- Becker, G.S. (1991). *A treatise on the family*. Cambridge, MA: Harvard University Press.
- Ben-Arieh, A. & Ofir, A. (2002). Time for (more) time-use studies: Studying the daily activities of children. *Childhood*, 9, 225–248.
<https://doi.org/10.1177/0907568202009002805>
- Berk, S.F. (1985). *The gender factory*. New York: Plenum Press.
- Blair, S.L. (1992a). Children's participation in household labor: Child socialization versus the need for household labor. *Journal of Youth and Adolescence*, 21, 241–258.
<https://doi.org/10.1007/BF01537339>
- Blair, S.L. (1992b). The sex-typing of children's household labor. Parental influence on daughters' and sons' housework. *Youth & Society*, 24, 178–203.
<https://doi.org/10.1177/0044118X92024002004>
- Bonke, J. (2010). Children's housework – Are girls more active than boys? *electronic International Journal of Time Use Research*, 7, 1–16.
<https://doi.org/10.13085/eIJTUR.7.1.1-16>
- Braun, M. & Scott, J. (2009). Changing public views of gender roles in seven nations, 1988–2002. In M. Haller, R. Jowell, & T. W. Smith (Eds.), *The International Social Survey Programme 1984–2009: Charting the globe* (pp. 358–377). Oxford: Routledge.
<http://www.dspace.cam.ac.uk/handle/1810/242230> (accessed May 6, 2020)
- Brody, C.J. & Steelman, L.C. (1985). Sibling structure and parental sex-typing of children's household tasks. *Journal of Marriage and the Family*, 47, 265–273.
<https://doi.org/10.2307/352127>

- Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and Family*, 62, 1208–1233. <https://doi.org/10.1111/j.1741-3737.2000.01208.x>
- Cordero-Coma, J. & Esping-Andersen, G. (2018). The intergenerational transmission of gender roles: Children's contribution to housework in Germany. *Journal of Marriage and Family*, 80, 1005–1019. <https://doi.org/10.1111/jomf.12497>
- Craig, L. & Powell, A. (2018). Shares of housework between mothers, fathers and young people: Routine and non-routine housework, doing housework for oneself and others. *Social Indicators Research*, 136, 269–281. <https://doi.org/10.1007/s11205-016-1539-3>
- Craig, L., Powell, A., & Brown, J.E. (2015). Co-resident parents and young people aged 15–34: Who does what housework? *Social Indicators Research*, 121, 569–588. <https://doi.org/10.1007/s11205-014-0643-5>
- Crouter, A.C., Head, M.R., Bumpus, M.F., & McHale, S.M. (2001). Household chores: Under what conditions do mothers lean on daughters? *New Directions for Child and Adolescent Development*, 94, 23–41. <https://doi.org/10.1002/cd.29>
- Crouter, A.C., Manke, B.A. & McHale, S.M. (1995). The family context of gender intensification in early adolescence. *Child Development*, 66, 317–329. <https://doi.org/10.2307/1131580>
- Cunningham, M. (2001). Parental influences on the gendered division of housework. *American Sociological Review*, 66, 184–203. <https://doi.org/10.2307/2657414>
- Dotti Sani, G.M. (2016). Undoing gender in housework? Participation in domestic chores by Italian fathers and children of different ages. *Sex Roles*, 74, 411–421. <https://doi.org/10.1007/s11199-016-0585-2>
- Ehling, M. (1999). The German Time Use Survey – Methods and results. In J. Merz & M. Ehling (Eds.), *Time use – Research, data and policy* (pp. 89–105). Baden-Baden: Nomos.

- Ehling, M., Holz, E., & Kahle I. (2001). Erhebungsdesign der Zeitbudgeterhebung 2001/2002. *Wirtschaft und Statistik*, 6/2001, 427–436.
https://www.destatis.de/GPStatistik/servlets/MCRFileNodeServlet/DEAusgabe_derivate_00000240/WistaJuni01.pdf (accessed May 6, 2020)
- Gager, C., Cooney, T.M. & Call, K.T. (1999). The effects of family characteristics and time use on teenagers' household labor. *Journal of Marriage and the Family*, 61, 982–994.
<https://doi.org/10.2307/354018>
- Gershuny, J., Harms, T., Doherty, A., Thomas, E., Milton, K., Kelly, P., & Foster, C. (2019). Testing self-report time-use diaries against objective instruments in real time. *Sociological Methodology*. <https://doi.org/10.1177/0081175019884591>
- Goldscheider, F.K. & Waite, L.J. (1991). *New families, no families. The transformation of the American home*. Berkeley: University of California Press.
- Gupta, S. (2006). The consequences of maternal employment during men's childhood for their adult housework performance. *Gender & Society*, 20, 60–86.
<https://doi.org/10.1177/0891243205282554>
- Hofferth, S. (2009). Changes in American children's time – 1997 to 2003. *Electronic International Journal of Time Use Research*, 6, 26–47.
<https://doi.org/10.13085/eIJTUR.6.1.26-47>
- Hook, J.L. (2017). Women's housework: New tests of time and money. *Journal of Marriage and Family*, 79, 179–198. <https://doi.org/10.1111/jomf.12351>
- Kamo, Y. (2000). “He said, she said”: Assessing discrepancies in husbands' and wives' reports on the division of household labor. *Social Science Research*, 29, 459–476.
<https://doi.org/10.1006/ssre.2000.0674>
- Kan, M.Y. & Pudney, S. (2008). Measurement error in stylized and diary data on time use. *Sociological Methodology*, 38, 101–132. <https://doi.org/10.1111/j.1467-9531.2008.00197.x>

- Kühhirt, M. (2012). Childbirth and the long-term division of labour within couples: How do substitution, bargaining power, and norms affect parents' time allocation in West Germany? *European Sociological Review*, 28, 565–582.
<https://doi.org/10.1093/esr/jcr026>
- Lachance-Grzela, M. & Bouchard, G. (2010). Why do women do the lion's share of housework? A decade of research. *Sex Roles*, 63, 767–780.
<https://doi.org/10.1007/s11199-010-9797-z>
- Lareau, A. (2011). *Unequal childhoods. Class, race, and family life*. University of California Press (2nd edition). www.jstor.org/stable/10.1525/j.ctt1ppgj4
- Larson, R.W. & Verma, S. (1999). How children and adolescents spend time across the world: Work, play, and developmental opportunities. *Psychological Bulletin*, 125, 701–736. <https://doi.org/10.1037/0033-2909.125.6.701>
- Lee, Y.-S., Schneider, B. & Waite L.J. (2003). Children and housework: Some unanswered questions. *Sociological Studies of Children and Youth*, 9, 105–125.
[https://doi.org/10.1016/S1537-4661\(03\)09007-X](https://doi.org/10.1016/S1537-4661(03)09007-X)
- Leopold, T., Skopek, J., & Schulz, F. (2018). Gender convergence in housework time: A life course and cohort perspective. *Sociological Science*, 5, 281–303.
<https://doi.org/10.15195/v5.a13>
- Maier, L. (2014). Methodik und Durchführung der Zeitverwendungserhebung 2012/2013. *Wirtschaft und Statistik*, 11/2014, 672–679.
https://www.destatis.de/GPStatistik/servlets/MCRFileNodeServlet/DEAusgabe_derivate_00000210/WistaNovember2014.pdf (accessed May 6, 2020)
- Manke, B., Seery, B.L., Crouter, A.C., & McHale, S.M. (1994). The three corners of domestic labor: Mothers', fathers', and children's weekday and weekend housework. *Journal of Marriage and the Family*, 56, 657–668. <https://doi.org/10.2307/352876>

- McHale, S.M., Crouter, A.C., & Tucker, C.J. (1999). Family context and gender role specialization in middle childhood: Comparing girls to boys and sisters to brothers. *Child Development*, 70, 990–1004. <https://doi.org/10.1111/1467-8624.00072>
- McHale, S.M., Crouter, A.C., & Whiteman, S.D. (2003). The family contexts of gender development in childhood and adolescence. *Social Development*, 12, 125–148. <https://doi.org/10.1111/1467-9507.00225>
- McHale, S.M., Updegraff, K.A. & Whiteman, S.D. (2012). Sibling relationships and influences in childhood and adolescence. *Journal of Marriage and Family*, 74, 913–930. <https://doi.org/10.1111/j.1741-3737.2012.01011.x>
- Schulz, F. (2019). Trends in children's gendered housework performance. Time use evidence from Germany, 1991-2013. *Child Indicators Research*, <https://doi.org/10.1007/s12187-019-09702-x>
- Steelman, L.C., Powell, B., Werum, R. & Carter, S. (2002). Reconsidering the effects of sibling configuration: Recent advances and challenges. *Annual Review of Sociology*, 28, 243–269. <https://doi.org/10.1146/annurev.soc.28.111301.093304>
- Stratton, L. (2012). The role of preference and opportunity costs in determining the time allocated to housework. *American Economic Review: Papers & Proceedings*, 102, 606–611. <https://doi.org/10.1257/aer.102.3.606>
- Sullivan, O., Gershuny, J., & Robinson, J.P. (2018). Stalled or uneven gender revolution. A long-term processual framework for understanding why change is slow. *Journal of Family Theory and Review*, 10, 263–279. <https://doi.org/10.1111/jftr.12248>
- West, C. & Zimmerman, D.H. (1987). Doing gender. *Gender & Society*, 1, 125–151. <https://doi.org/10.1177/0891243287001002002>
- Williams, R. (2012). Using the margins command to estimate and interpret adjusted predictions and marginal effects. *The Stata Journal*, 12, 308–331. <http://www.stata-journal.com/sjpdf.html?articlenum=st0260> (accessed May 6, 2020)

Wirth, H. (2017). Die Zeitverwendung von Kindern und Jugendlichen – Lernen am Modell?

In Statistisches Bundesamt (Ed.), *Wie die Zeit vergeht. Analysen zur Zeitverwendung in Deutschland* (pp. 117–134). Wiesbaden.

https://www.destatis.de/DE/Themen/Gesellschaft-Umwelt/Einkommen-Konsum-Lebensbedingungen/Zeitverwendung/Publikationen/Downloads-Zeitverwendung/tagungsband-wie-die-zeit-vergeht-5639103169004.pdf?__blob=publicationFile&v=3 (accessed May 6, 2020)

Table 1. *Descriptives of the Weekday and Weekend Estimation Samples.*

	Weekday	Weekend
Number of households	1,212	1,005
Number of diaries	9,158	4,367
Sex-composition of siblings		
Two boys	.26	.26
Elder boy & younger girl	.26	.25
Elder girl & younger boy	.25	.25
Two girls	.24	.24
Employment of parents		
Both full-time	.19	.17
Father full-time, mother part-time	.51	.53
Father full-time, mother not employed	.22	.20
Father not full-time	.08	.09
Number of employed children	0.52 (0.71)	0.50 (0.71)
University degree in household	.42	.45
Age of elder child ^a	17.7 (3.4)	17.5 (3.5)
Age difference (elder-younger)	3.3 (1.9)	3.2 (1.9)
East Germany	.21	.20
Survey year		
1991/1992	.28	.14
2001/2002	.42	.50
2012/2013	.29	.35

Notes. ^a For the regression models, this variable is transformed by subtracting the minimum age of 10 years. German Time Use Study, pooled data for 1991/1992, 2001/2002, and 2012/2013, own calculations. Case numbers, means, standard deviations in parentheses (if applicable); rounding differences to 1 may apply.

FIGURE 1. TIME USE FOR HOUSEWORK ACTIVITIES ON WEEKDAYS AND WEEKENDS, BY SEX COMPOSITION OF CHILDREN.

Notes. Predicted minutes per day are plotted from Tables S1, S2, which are based on estimation results in Tables S3-S14 in the supplement to this article. German Time Use Study, pooled data for 1991/1992, 2001/2002, and 2012/2013, own calculations.

FIGURE 2. RELATIVE CONTRIBUTION TO HOUSEWORK BY ALL HOUSEHOLD MEMBERS ON WEEKDAYS AND WEEKENDS, BY SEX COMPOSITION OF CHILDREN.

Notes. Predicted shares are plotted from Tables S1, S2, which are based on estimation results in Tables S3-S14 in the supplement to this article. German Time Use Study, pooled data for 1991/1992, 2001/2002, and 2012/2013, own calculations.

FIGURE 3. DIVISION OF CHILDREN'S HOUSEWORK TIME BY OLDER AND YOUNGER CHILD ON WEEKDAYS AND WEEKENDS, BY SEX COMPOSITION OF CHILDREN.

Notes. Predicted shares are plotted from Tables S1, S2, which are based on estimation results in Tables S3-S14 in the supplement to this article. German Time Use Study, pooled data for 1991/1992, 2001/2002, and 2012/2013, own calculations.

Supplement to the article

**Housework time within family households:
Mothers', fathers', and siblings' contributions**

Table S1. Predicted time and predicted shares of housework activities for all household members on weekdays by children's sex composition

	Time						Share of total household time ^a						Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Total housework													
Two boys	53.5	218.9	272.4	26.0	24.3	50.2	322.7	17.4	66.4	16.1	8.1	8.1	50.3
	[46.7,60.4]	[208.1,229.7]	[259.8,285.0]	[20.8,31.1]	[19.4,29.1]	[42.4,58.1]	[307.0,338.3]	[15.7,19.2]	[64.1,68.7]	[14.3,17.9]	[6.8,9.4]	[6.8,9.3]	[45.9,54.6]
Elder boy & younger girl	61.5	220.3	281.9	28.3	39.1	67.4	349.3	17.5	63.6	18.9	8.1	10.8	41.5
	[54.6,68.4]	[209.4,231.2]	[269.2,294.5]	[23.2,33.5]	[34.2,43.9]	[59.6,75.3]	[333.6,365.0]	[15.8,19.2]	[61.3,65.9]	[17.1,20.7]	[6.8,9.4]	[9.6,12.0]	[37.5,45.5]
Elder girl & younger boy	63.2	213.2	276.4	47.9	26.6	74.4	350.9	17.7	60.5	21.8	14.3	7.5	65.1
	[56.3,70.2]	[202.2,224.2]	[263.6,289.2]	[42.7,53.1]	[21.7,31.5]	[66.5,82.4]	[334.9,366.8]	[16.0,19.5]	[58.2,62.9]	[20.0,23.6]	[13.0,15.7]	[6.2,8.7]	[61.0,69.1]
Two girls	59.2	212.0	271.2	47.7	42.5	90.2	361.4	15.4	60.3	24.3	13.0	11.4	54.7
	[52.1,66.3]	[200.7,223.2]	[258.0,284.3]	[42.3,53.0]	[37.5,47.6]	[82.1,98.3]	[345.1,377.6]	[13.6,17.2]	[57.9,62.7]	[22.5,26.2]	[11.6,14.3]	[10.1,12.6]	[50.6,58.8]
Cooking & dishes													
Two boys	15.3	84.8	100.2	7.1	5.4	12.4	112.6	13.7	74.5	11.9	6.2	5.6	52.0
	[12.5,18.1]	[79.7,90.0]	[94.7,105.6]	[5.1,9.0]	[3.6,7.1]	[9.5,15.4]	[106.2,119.0]	[11.5,15.8]	[71.6,77.4]	[9.7,14.1]	[4.6,7.9]	[4.1,7.1]	[45.6,58.4]
Elder boy & younger girl	19.2	79.4	98.6	6.5	10.7	17.2	115.8	16.1	68.2	15.6	5.4	10.2	35.4
	[16.4,22.0]	[74.2,84.6]	[93.1,104.1]	[4.5,8.5]	[8.9,12.5]	[14.2,20.2]	[109.4,122.2]	[14.0,18.3]	[65.4,71.1]	[13.4,17.8]	[3.8,7.1]	[8.7,11.7]	[29.8,41.0]
Elder girl & younger boy	18.6	79.4	98.0	12.9	5.3	18.2	116.2	16.2	66.5	17.4	12.5	4.9	69.8
	[15.8,21.5]	[74.2,84.6]	[92.4,103.6]	[10.9,15.0]	[3.5,7.0]	[15.2,21.2]	[109.7,122.7]	[14.0,18.4]	[63.5,69.4]	[15.2,19.7]	[10.9,14.2]	[3.4,6.4]	[64.4,75.2]
Two girls	17.0	77.9	94.9	14.0	13.9	27.9	122.8	13.6	64.2	24.3	11.8	10.5	53.6
	[14.1,19.9]	[72.6,83.3]	[89.2,100.6]	[12.0,16.1]	[12.1,15.7]	[24.9,31.0]	[116.2,129.5]	[11.4,15.8]	[61.2,67.2]	[20.0,24.6]	[10.1,13.5]	[9.0,12.1]	[48.3,58.9]
Cleaning & laundry													
Two boys	11.3	92.9	104.2	5.1	6.1	11.2	115.4	11.8	77.4	10.8	5.3	5.5	49.0
	[8.5,14.0]	[86.1,99.8]	[96.8,111.6]	[2.8,7.5]	[3.8,8.3]	[7.7,14.7]	[106.8,124.0]	[9.7,13.9]	[74.4,80.5]	[8.4,13.2]	[3.6,7.0]	[3.8,7.3]	[41.7,56.3]
Elder boy & younger girl	11.8	94.8	106.6	6.8	11.9	18.7	125.3	10.6	74.4	15.0	5.1	9.9	35.3
	[9.0,14.5]	[88.0,101.7]	[99.2,114.1]	[4.5,9.2]	[9.7,14.2]	[15.2,22.3]	[116.7,133.9]	[8.5,12.7]	[71.3,77.4]	[12.6,17.4]	[3.4,6.8]	[8.2,11.6]	[28.8,41.7]
Elder girl & younger boy	13.9	89.1	103.0	13.8	7.9	21.6	124.6	11.5	70.0	18.5	12.4	6.2	65.1
	[11.1,16.6]	[82.1,96.0]	[95.4,110.5]	[11.4,16.1]	[5.6,10.2]	[18.1,25.2]	[115.9,133.3]	[9.3,13.6]	[66.9,73.1]	[16.1,21.0]	[10.6,14.1]	[4.4,7.9]	[58.9,71.3]
Two girls	11.5	91.5	102.9	13.0	11.3	24.3	127.3	8.6	71.4	20.1	10.3	9.8	53.8
	[8.6,14.3]	[84.4,98.6]	[95.2,110.7]	[10.6,15.5]	[9.0,13.6]	[20.7,28.0]	[118.4,136.2]	[6.4,10.8]	[68.2,74.5]	[17.5,22.6]	[8.5,12.1]	[8.0,11.6]	[47.8,59.9]
Grocery shopping													
Two boys	17.6	38.3	56.0	10.7	9.3	19.9	75.9	22.5	54.4	23.2	11.8	11.4	52.7
	[14.5,20.8]	[34.0,42.7]	[50.0,61.9]	[7.3,14.0]	[6.4,12.2]	[15.1,24.8]	[67.1,84.7]	[19.4,25.6]	[50.7,58.1]	[19.9,26.4]	[9.1,14.4]	[9.0,13.7]	[46.1,59.3]
Elder boy & younger girl	19.5	41.4	60.8	11.0	14.2	25.3	86.1	22.3	53.0	24.7	12.0	12.8	45.6
	[16.3,22.7]	[37.0,45.8]	[54.9,66.8]	[7.7,14.4]	[11.3,17.1]	[20.4,30.1]	[77.3,95.0]	[19.3,25.4]	[49.3,56.6]	[21.5,27.9]	[9.3,14.6]	[10.5,15.1]	[39.4,51.7]
Elder girl & younger boy	15.2	40.3	55.5	19.0	9.0	28.0	83.6	21.2	48.8	30.1	20.4	9.6	64.5
	[12.0,18.5]	[35.9,44.7]	[49.5,61.6]	[15.6,22.4]	[6.1,12.0]	[23.1,32.9]	[74.6,92.5]	[18.1,24.3]	[45.1,52.4]	[26.8,33.3]	[17.8,23.1]	[7.3,11.9]	[58.5,70.5]
Two girls	20.6	40.0	60.6	19.0	16.1	35.1	95.7	20.6	48.2	31.3	17.1	14.2	54.7
	[17.3,23.9]	[35.5,44.6]	[54.4,66.8]	[15.5,22.4]	[13.2,19.1]	[30.1,40.1]	[86.6,104.9]	[17.4,23.8]	[44.4,52.0]	[27.9,34.6]	[14.3,19.8]	[11.8,16.6]	[48.6,60.8]
Routine chores ^c													
Two boys	44.2	214.9	259.1	22.9	20.8	43.7	302.7	15.6	69.2	15.2	7.7	7.5	50.6
	[38.4,49.9]	[204.2,225.6]	[247.3,270.8]	[18.0,27.8]	[16.4,25.2]	[36.4,51.0]	[288.2,317.3]	[14.0,17.3]	[66.8,71.5]	[13.4,17.0]	[6.3,9.0]	[6.3,8.7]	[46.1,55.0]
Elder boy & younger girl	50.3	214.8	265.1	24.4	36.9	61.3	326.4	15.5	66.0	18.5	7.5	11.0	39.6
	[44.5,56.1]	[204.0,225.5]	[253.3,276.9]	[19.5,29.3]	[32.5,41.3]	[54.0,68.6]	[311.8,341.0]	[13.9,17.2]	[63.6,68.3]	[16.6,20.3]	[6.1,8.8]	[9.8,12.2]	[35.5,43.7]
Elder girl & younger boy	47.7	207.8	255.5	45.8	22.2	68.0	323.5	14.9	63.4	21.7	14.8	6.9	66.0
	[41.9,53.6]	[196.9,218.6]	[243.6,267.5]	[40.8,50.8]	[17.7,26.6]	[60.6,75.4]	[308.8,338.3]	[13.2,16.5]	[61.0,65.8]	[19.9,23.6]	[13.4,16.2]	[5.7,8.1]	[61.9,70.2]
Two girls	48.6	208.1	256.7	46.0	41.3	87.4	344.1	13.6	61.8	24.8	13.2	11.6	54.8
	[42.6,54.6]	[197.0,219.2]	[244.5,269.0]	[40.9,51.1]	[36.8,45.9]	[79.8,94.9]	[329.0,359.2]	[11.8,15.3]	[59.3,64.2]	[22.9,26.7]	[11.8,14.6]	[10.4,12.9]	[50.7,59.0]
Repairs, car & admin													
Two boys	9.6	3.9	13.5	3.0	3.5	6.5	20.0	45.3	27.5	27.2	14.2	13.0	53.5
	[6.2,12.9]	[2.5,5.4]	[9.5,17.5]	[1.9,4.1]	[1.8,5.2]	[4.4,8.6]	[15.3,24.7]	[38.8,51.7]	[21.6,33.5]	[21.8,32.7]	[9.6,18.8]	[9.3,16.7]	[42.6,64.4]
Elder boy & younger girl	11.2	5.4	16.6	3.9	2.2	6.1	22.7	44.8	29.4	25.8	18.6	7.1	67.5
	[7.8,14.6]	[3.9,6.9]	[12.6,20.6]	[2.8,5.0]	[0.5,3.9]	[4.0,8.2]	[18.0,27.5]	[38.6,51.0]	[23.7,35.1]	[20.5,31.1]	[14.2,23.1]	[3.6,10.7]	[56.2,78.8]
Elder girl & younger boy	15.4	5.4	20.8	2.0	4.4	6.4	27.2	52.1	25.7	22.3	12.4	9.9	53.6
	[11.9,18.8]	[3.9,6.9]	[16.7,24.8]	[0.9,3.1]	[2.7,6.1]	[4.3,8.5]	[22.4,32.0]	[45.6,58.5]	[19.7,31.7]	[16.8,27.8]	[7.8,17.0]	[6.2,13.6]	[41.3,65.9]
Two girls	10.6	3.8	14.4	1.6	1.2	2.8	17.2	53.3	29.8	16.9	11.0	5.9	67.7
	[7.1,14.1]	[2.2,5.3]	[10.2,18.5]	[0.5,2.8]	[-0.6,2.9]	[0.6,5.0]	[12.3,22.1]	[46.3,60.3]	[23.3,36.2]	[11.0,22.8]	[6.1,16.0]	[1.9,9.9]	[53.2,82.3]

Notes: ^a Sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c Sum of cooking, dishes, cleaning, laundry, and shopping. Time in minutes per day, means, shares, and 95%-confidence intervals in brackets; all predictions are estimated from the models in Tables S3-S8. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S2. Predicted time and predicted shares of housework activities for all household members on weekends by children's sex composition

	Time						Share of total household time ^a						Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Total housework													
Two boys	83.8 [73.2,94.4]	186.2 [172.6,199.8]	270.0 [250.8,289.1]	33.8 [25.6,41.9]	31.3 [23.3,39.2]	65.0 [52.5,77.6]	335.0 [309.6,360.5]	24.4 [22.0,26.9]	55.8 [52.9,58.6]	19.8 [17.2,22.3]	10.2 [8.3,12.0]	9.7 [7.9,11.4]	50.8 [45.9,55.8]
Elder boy & younger girl	88.8 [78.1,99.5]	185.7 [171.9,199.4]	274.5 [255.1,293.8]	37.5 [29.3,45.7]	62.9 [54.9,70.9]	100.3 [87.7,113.0]	374.8 [349.1,400.5]	23.2 [20.8,25.7]	51.9 [49.1,54.8]	24.8 [22.3,27.4]	9.7 [7.8,11.5]	15.2 [13.5,16.9]	36.3 [31.6,41.0]
Elder girl & younger boy	83.4 [72.6,94.1]	177.0 [163.2,190.7]	260.3 [241.0,279.7]	65.1 [56.9,73.4]	39.2 [31.2,47.2]	104.3 [91.7,117.0]	364.7 [338.9,390.4]	22.5 [20.0,24.9]	50.3 [47.4,53.2]	27.3 [24.8,29.8]	16.8 [14.9,18.7]	10.5 [8.8,12.2]	61.5 [56.8,66.2]
Two girls	90.4 [79.4,101.5]	182.7 [168.5,196.9]	273.1 [253.2,293.1]	65.9 [57.4,74.4]	55.9 [47.6,64.1]	121.8 [108.7,134.8]	394.9 [368.4,421.4]	21.9 [19.4,24.4]	50.5 [47.5,53.5]	27.6 [25.0,30.3]	15.2 [13.2,17.1]	12.5 [10.7,14.3]	55.3 [50.5,60.1]
Cooking & dishes													
Two boys	30.9 [25.8,36.0]	86.4 [78.9,93.8]	117.3 [107.9,126.7]	9.5 [5.4,13.5]	8.1 [4.9,11.4]	17.6 [12.0,23.2]	134.9 [123.4,146.4]	22.0 [18.8,25.2]	65.7 [61.9,69.5]	12.4 [9.4,15.4]	6.5 [4.2,8.8]	5.9 [3.9,7.9]	49.4 [42.2,56.7]
Elder boy & younger girl	27.1 [22.0,32.3]	80.8 [73.2,88.3]	107.9 [98.4,117.4]	9.1 [5.0,13.2]	18.8 [15.5,22.1]	27.9 [22.2,33.6]	135.8 [124.2,147.4]	19.8 [16.6,23.0]	59.6 [55.8,63.4]	20.7 [17.7,23.6]	7.8 [5.5,10.0]	12.9 [10.9,14.9]	33.3 [26.9,39.6]
Elder girl & younger boy	27.5 [22.3,32.7]	77.5 [70.0,85.1]	105.1 [95.6,114.5]	22.0 [17.9,26.1]	10.7 [7.4,14.0]	32.7 [27.0,38.4]	137.8 [126.1,149.4]	19.9 [16.6,23.1]	57.3 [53.4,61.2]	22.9 [19.9,25.9]	15.0 [12.8,17.3]	7.9 [5.8,9.9]	67.6 [61.4,73.8]
Two girls	30.3 [24.9,35.6]	73.8 [66.0,81.5]	104.1 [94.3,113.9]	25.5 [21.3,29.7]	17.3 [13.9,20.8]	42.8 [36.9,48.7]	146.6 [134.9,158.9]	20.7 [17.4,24.0]	54.4 [50.5,58.4]	24.9 [21.8,28.0]	14.9 [12.6,17.3]	10.0 [7.9,12.0]	58.3 [52.1,64.4]
Cleaning & laundry													
Two boys	18.7 [14.1,23.3]	78.6 [69.5,87.6]	97.2 [86.5,108.0]	10.9 [6.4,15.3]	13.0 [8.5,17.6]	23.9 [16.9,31.0]	121.2 [107.3,135.0]	15.8 [12.7,18.9]	65.5 [61.4,69.6]	18.7 [15.1,22.3]	8.9 [6.2,11.6]	9.8 [7.3,12.2]	47.0 [39.5,54.6]
Elder boy & younger girl	23.8 [19.2,28.5]	76.6 [67.5,85.8]	100.5 [89.6,111.3]	11.7 [7.2,16.2]	24.1 [19.5,28.7]	35.8 [28.7,42.9]	136.3 [122.3,150.3]	18.9 [15.8,22.0]	58.7 [54.6,62.8]	22.4 [18.8,26.0]	8.1 [5.3,10.8]	14.3 [11.9,16.8]	31.8 [25.0,38.5]
Elder girl & younger boy	20.6 [16.0,25.2]	72.3 [63.1,81.4]	92.9 [82.0,103.8]	25.7 [21.2,30.2]	14.4 [9.7,19.0]	40.1 [33.0,47.2]	133.0 [119.0,147.0]	14.9 [11.7,18.0]	58.8 [54.6,62.9]	26.4 [22.8,30.0]	17.5 [14.7,20.3]	8.9 [6.4,11.4]	65.8 [59.1,72.5]
Two girls	21.6 [16.8,26.4]	78.9 [69.5,88.3]	100.5 [89.3,111.7]	24.8 [20.1,29.4]	19.4 [14.6,24.2]	44.1 [36.8,51.5]	144.6 [130.2,159.1]	14.5 [11.3,17.7]	58.2 [54.0,62.5]	27.3 [23.6,30.9]	15.9 [13.1,18.7]	11.4 [8.9,13.9]	55.5 [49.0,62.1]
Grocery shopping													
Two boys	20.3 [15.2,25.4]	22.1 [16.0,28.1]	42.4 [32.4,52.4]	8.1 [3.7,12.5]	7.8 [2.9,12.6]	15.8 [8.5,23.2]	58.2 [43.1,73.3]	35.5 [29.7,41.3]	41.0 [35.3,46.7]	23.4 [17.8,29.1]	11.9 [7.6,16.1]	11.6 [7.2,15.9]	52.6 [41.6,63.6]
Elder boy & younger girl	23.2 [18.1,28.4]	27.7 [21.6,33.8]	50.9 [40.8,61.0]	11.8 [7.4,16.2]	16.0 [11.2,20.9]	27.8 [20.4,35.3]	78.8 [63.5,94.0]	34.5 [28.6,40.3]	34.1 [28.3,39.9]	31.4 [25.7,37.2]	12.9 [8.6,17.1]	18.6 [14.2,23.0]	46.6 [36.7,56.4]
Elder girl & younger boy	17.4 [12.3,22.6]	24.8 [18.7,31.0]	42.3 [32.2,52.4]	15.2 [10.7,19.6]	8.9 [4.0,13.8]	24.1 [16.6,31.5]	66.3 [51.1,81.6]	33.3 [27.6,39.1]	33.7 [29.0,40.4]	32.0 [26.4,37.6]	19.2 [15.0,23.4]	12.8 [8.5,17.1]	56.3 [46.6,66.1]
Two girls	20.9 [15.6,26.2]	29.1 [22.8,35.4]	50.0 [39.6,60.4]	14.7 [10.1,19.3]	18.1 [13.1,23.1]	32.8 [25.1,40.5]	82.8 [67.1,98.5]	30.3 [24.2,36.4]	38.2 [32.1,44.2]	31.6 [25.6,37.5]	14.8 [10.3,19.3]	16.7 [12.2,21.3]	47.7 [38.2,57.2]
Routine chores ^c													
Two boys	69.5 [60.5,78.6]	184.9 [171.4,198.4]	254.4 [236.9,272.0]	28.4 [20.7,36.1]	29.0 [21.5,36.5]	57.4 [45.7,69.2]	311.8 [288.4,335.3]	22.2 [19.8,24.6]	59.1 [56.2,62.1]	18.7 [16.1,21.3]	9.6 [7.7,11.5]	9.2 [7.4,10.9]	51.2 [46.1,56.3]
Elder boy & younger girl	74.2 [65.1,83.3]	183.5 [169.8,197.1]	257.7 [239.9,275.4]	32.6 [24.9,40.3]	59.0 [51.4,66.5]	91.5 [79.7,103.4]	349.2 [325.5,372.9]	21.0 [18.6,23.4]	54.5 [51.6,57.5]	24.5 [21.9,27.1]	9.2 [7.3,11.1]	15.3 [13.5,17.0]	34.3 [29.4,39.1]
Elder girl & younger boy	65.3 [56.1,74.4]	173.8 [160.1,187.5]	239.1 [221.3,256.8]	62.6 [54.8,70.3]	23.1 [26.2,41.3]	96.4 [84.5,108.2]	335.4 [311.7,359.2]	19.6 [17.2,22.0]	52.7 [49.7,55.7]	27.7 [25.1,30.4]	17.5 [15.6,19.5]	10.2 [8.5,12.0]	63.0 [58.3,67.8]
Two girls	72.6 [63.2,82.0]	180.5 [166.4,194.6]	253.1 [234.8,271.3]	64.9 [56.9,72.9]	54.9 [47.1,62.6]	119.8 [107.5,132.0]	372.8 [348.4,397.3]	19.4 [16.9,21.9]	52.0 [49.0,55.1]	28.6 [25.9,31.3]	15.8 [13.8,17.7]	12.8 [11.0,14.7]	55.5 [50.7,60.3]
Repairs, car & admin													
Two boys	14.6 [9.0,20.1]	1.4 [0.0,2.8]	16.0 [9.9,22.0]	5.4 [2.6,8.2]	2.3 [-0.5,5.1]	7.7 [3.4,12.0]	23.6 [15.5,31.7]	68.8 [59.4,78.3]	11.3 [4.7,17.9]	19.8 [11.9,27.7]	11.4 [4.9,17.9]	8.5 [3.5,13.4]	58.0 [40.3,75.8]
Elder boy & younger girl	14.7 [9.1,20.4]	2.2 [0.8,3.6]	16.9 [10.9,23.0]	4.9 [2.0,7.7]	3.8 [1.0,6.7]	8.7 [4.4,13.1]	25.6 [17.5,33.8]	64.8 [55.9,73.6]	10.9 [4.7,17.1]	24.3 [16.9,31.7]	16.2 [10.1,22.3]	8.1 [3.5,12.8]	60.6 [43.1,78.2]
Elder girl & younger boy	18.6 [13.0,24.3]	3.1 [1.7,4.5]	21.7 [15.6,27.8]	5.4 [-0.3,5.4]	2.5 [2.5,8.3]	5.4 [3.6,12.3]	8.0 [21.5,37.9]	29.7 [53.4,71.7]	62.5 [8.2,21.1]	14.7 [15.1,30.5]	10.1 [3.8,16.4]	12.7 [7.9,17.5]	40.3 [23.0,57.7]
Two girls	17.9 [12.1,23.7]	2.2 [0.8,3.6]	20.1 [13.8,26.4]	1.0 [-1.9,3.9]	1.0 [-2.0,4.0]	2.0 [-2.5,6.5]	22.1 [13.7,30.5]	68.5 [58.4,78.5]	17.7 [10.6,24.7]	13.9 [5.4,22.3]	10.6 [3.6,17.6]	3.2 [-2.0,8.5]	62.9 [37.7,88.1]

Notes: ^a Sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c Sum of cooking, dishes, cleaning, laundry, and shopping. Time in minutes per day, means, shares, and 95%-confidence intervals in brackets; all predictions are estimated from the models in Tables S9-S14. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S3. OLS-regression of time use for total housework and shares between all household members on weekdays

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	8.01 (4.97)	1.42 (7.83)	9.44 (9.14)	2.38 (3.70)	14.79*** (3.50)	17.18** (5.66)	26.61* (11.33)	0.07 (1.25)	-2.79+ (1.67)	2.74* (1.30)	-0.02 (0.95)	2.74** (0.87)	-8.78** (3.03)
Elder girl & younger boy	9.72+ (5.00)	-5.72 (7.88)	4.00 (9.19)	21.91*** (3.72)	2.30 (3.52)	24.20*** (5.69)	28.20* (11.39)	0.28 (1.25)	-5.87*** (1.68)	5.64*** (1.31)	6.22*** (0.96)	-0.59 (0.88)	14.78*** (3.04)
Two girls	5.67 (5.06)	-6.92 (7.97)	-1.25 (9.30)	21.70*** (3.76)	18.26*** (3.56)	39.96*** (5.76)	38.71*** (11.53)	-2.01 (1.27)	-6.11*** (1.71)	8.21*** (1.32)	4.85*** (0.97)	3.33*** (0.89)	4.42 (3.07)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-4.44 (5.30)	54.15*** (8.35)	49.72*** (9.74)	-5.91 (3.94)	1.57 (3.73)	-4.34 (6.03)	45.38*** (12.07)	-4.35** (1.33)	10.01*** (1.79)	-5.65*** (1.39)	-3.74*** (1.02)	-1.85* (0.93)	-2.43 (3.09)
Male breadwinner	-9.62 (5.94)	145.86*** (9.35)	136.24*** (10.91)	-5.69 (4.42)	-2.93 (4.18)	-8.63 (6.76)	127.61*** (13.52)	-9.56*** (1.54)	21.60*** (2.06)	-12.03*** (1.60)	-6.68*** (1.17)	-5.28*** (1.08)	-0.13 (3.46)
Male not full-time	80.24*** (7.60)	47.25*** (11.98)	127.50*** (13.97)	-4.77 (5.66)	3.95 (5.35)	-0.82 (8.65)	126.68*** (17.31)	13.95*** (1.94)	-4.69+ (2.61)	-9.19*** (2.02)	-5.20*** (1.48)	-3.97** (1.36)	-5.19 (4.53)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	7.43 (4.81)	-10.72 (7.58)	-3.29 (8.84)	-1.89 (3.58)	-1.51 (3.39)	-3.41 (5.48)	-6.69 (10.96)	2.80* (1.20)	-1.83 (1.61)	-1.01 (1.25)	0.23 (0.92)	-1.24 (0.84)	-0.24 (2.81)
2	4.64 (6.91)	13.86 (10.88)	18.50 (12.70)	-5.95 (5.14)	0.96 (4.86)	-4.99 (7.86)	13.51 (15.73)	-0.04 (1.73)	4.13+ (2.32)	-3.96* (1.80)	-2.57+ (1.32)	-1.39 (1.21)	-0.07 (4.06)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	-0.56 (3.73)	-8.36 (5.87)	-8.91 (6.85)	1.21 (2.77)	-2.67 (2.63)	-1.46 (4.24)	-10.37 (8.49)	1.57+ (0.93)	-1.51 (1.25)	-0.02 (0.97)	0.56 (0.71)	-0.60 (0.65)	2.12 (2.20)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	3.37 (4.51)	-25.05*** (7.11)	-21.68** (8.30)	1.61 (3.36)	-2.46 (3.18)	-0.85 (5.14)	-22.53* (10.28)	1.76 (1.13)	-2.94+ (1.52)	1.16 (1.18)	1.24 (0.86)	-0.09 (0.79)	2.70 (2.65)
2012/2013	13.67** (4.95)	-40.02*** (7.79)	-26.35** (9.09)	0.29 (3.68)	-5.74+ (3.48)	-5.45 (5.63)	-31.80** (11.26)	4.59*** (1.24)	-4.48** (1.67)	-0.13 (1.29)	0.96 (0.95)	-1.10 (0.87)	4.54 (2.91)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	4.10 (4.82)	-35.31*** (7.60)	-31.21*** (8.87)	7.88* (3.59)	6.89* (3.40)	14.78** (5.49)	-16.43 (10.99)	1.45 (1.21)	-7.64*** (1.62)	6.20*** (1.26)	3.85*** (0.92)	2.38** (0.85)	1.57 (2.82)
Age of oldest child	-2.12** (0.75)	-0.90 (1.19)	-3.03* (1.39)	1.70** (0.56)	1.19* (0.53)	2.90*** (0.86)	-0.13 (1.72)	-0.69*** (0.19)	-0.42+ (0.25)	1.11*** (0.20)	0.62*** (0.14)	0.50*** (0.13)	-0.16 (0.44)
Age difference (elder-younger)	0.52 (1.10)	6.02*** (1.73)	6.54** (2.02)	0.95 (0.82)	-1.39+ (0.77)	-0.44 (1.25)	6.10* (2.50)	-0.15 (0.28)	0.72* (0.37)	-0.57* (0.29)	-0.03 (0.21)	-0.54** (0.19)	1.07+ (0.64)
Total housework time, household								0.69*	-1.61***	0.89**	0.33	0.57*	
								(0.32)	(0.43)	(0.33)	(0.24)	(0.22)	
Total housework time, children ^c													-0.44 (1.49)
Constant	57.29*** (8.14)	177.03*** (12.82)	234.31*** (14.96)	12.71* (6.06)	21.85*** (5.73)	34.57*** (9.26)	268.88*** (18.54)	20.24*** (2.21)	68.16*** (2.96)	11.66*** (2.30)	4.53** (1.68)	7.08*** (1.55)	46.32*** (4.88)
N	1212	1212	1212	1212	1212	1212	1212	1212	1212	1212	1212	1212	1074
R²	0.144	0.260	0.194	0.073	0.048	0.064	0.130	0.169	0.187	0.145	0.129	0.079	0.070

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S4. OLS-regression of time use for cooking and dishes and shares between all household members on weekdays

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	3.88+ (2.04)	-5.44 (3.72)	-1.56 (3.97)	-0.54 (1.44)	5.32*** (1.28)	4.78* (2.13)	3.22 (4.63)	2.48 (1.55)	-6.29** (2.09)	3.76* (1.59)	-0.83 (1.19)	4.61*** (1.09)	-16.60*** (4.32)
Elder girl & younger boy	3.31 (2.05)	-5.47 (3.74)	-2.15 (4.00)	5.89*** (1.45)	-0.11 (1.28)	5.78** (2.14)	3.63 (4.66)	2.50 (1.57)	-8.07*** (2.11)	5.56*** (1.61)	6.28*** (1.20)	-0.73 (1.10)	17.83*** (4.27)
Two girls	1.68 (2.07)	-6.93+ (3.79)	-5.25 (4.04)	6.97*** (1.47)	8.54*** (1.30)	15.52*** (2.17)	10.27* (4.71)	-0.08 (1.58)	-10.35*** (2.12)	10.44*** (1.62)	5.60*** (1.21)	4.88*** (1.11)	1.59 (4.26)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-2.16 (2.17)	18.19*** (3.96)	16.03*** (4.23)	0.13 (1.54)	-0.13 (1.36)	0.00 (2.27)	16.04** (4.93)	-3.27* (1.66)	7.01** (2.23)	-3.77* (1.70)	-2.04 (1.27)	-1.77 (1.17)	-4.90 (4.11)
Male breadwinner	-4.52+ (2.43)	54.78*** (4.44)	50.26*** (4.74)	-2.50 (1.72)	-1.86 (1.52)	-4.37+ (2.54)	45.89*** (5.53)	-7.96*** (1.91)	18.47*** (2.57)	-10.53*** (1.96)	-6.03*** (1.46)	-4.54*** (1.34)	-3.70 (4.72)
Male not full-time	31.25*** (3.12)	16.51** (5.69)	47.76*** (6.07)	-1.02 (2.20)	1.78 (1.95)	0.76 (3.26)	48.52*** (7.08)	18.47*** (2.42)	-11.31*** (3.26)	-7.21** (2.48)	-4.96** (1.85)	-2.30 (1.70)	-8.31 (6.33)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	3.30+ (1.97)	-1.43 (3.60)	1.87 (3.84)	-1.64 (1.39)	0.09 (1.23)	-1.55 (2.06)	0.32 (4.48)	2.61+ (1.50)	0.06 (2.02)	-2.67+ (1.54)	-1.33 (1.15)	-1.31 (1.06)	-3.58 (3.75)
2	4.80+ (2.83)	15.82** (5.17)	20.62*** (5.52)	-4.95* (2.00)	-1.07 (1.77)	-6.02* (2.96)	14.60* (6.43)	1.55 (2.16)	8.26** (2.90)	-9.79*** (2.21)	-6.82*** (1.65)	-2.99* (1.52)	1.94 (5.61)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	3.13* (1.53)	-4.56 (2.79)	-1.42 (2.98)	1.35 (1.08)	-1.15 (0.96)	0.20 (1.60)	-1.22 (3.47)	3.63** (1.16)	-3.20* (1.57)	-0.42 (1.19)	0.82 (0.89)	-1.23 (0.82)	4.07 (2.98)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	-0.13 (1.85)	-8.52* (3.38)	-8.64* (3.61)	0.22 (1.31)	-1.98+ (1.16)	-1.76 (1.93)	-10.41* (4.20)	0.89 (1.41)	-1.30 (1.89)	0.35 (1.44)	1.08 (1.07)	-0.70 (0.99)	3.98 (3.55)
2012/2013	5.42** (2.03)	-17.23*** (3.70)	-11.81** (3.95)	1.22 (1.43)	-1.32 (1.27)	-0.09 (2.12)	-11.91** (4.61)	4.50** (1.54)	-4.33* (2.08)	-0.18 (1.58)	0.48 (1.18)	-0.66 (1.08)	4.50 (3.97)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	1.86 (1.98)	-11.32** (3.61)	-9.45* (3.85)	4.69*** (1.40)	3.82** (1.24)	8.50*** (2.07)	-0.95 (4.49)	1.71 (1.50)	-10.29*** (2.02)	8.57*** (1.54)	4.48*** (1.15)	4.12*** (1.06)	-1.94 (3.76)
Age of oldest child													
	-1.07*** (0.31)	-1.75** (0.56)	-2.83*** (0.60)	0.71** (0.22)	0.26 (0.19)	0.97** (0.32)	-1.86** (0.70)	-0.73** (0.24)	-0.90** (0.32)	1.63*** (0.24)	1.00*** (0.18)	0.63*** (0.17)	0.01 (0.60)
Age difference (elder-younger)													
	0.10 (0.45)	3.79*** (0.82)	3.89*** (0.88)	-0.06 (0.32)	-0.40 (0.28)	-0.46 (0.47)	3.42*** (1.02)	-0.28 (0.34)	1.44** (0.46)	-1.16*** (0.35)	-0.59* (0.26)	-0.57* (0.24)	1.34 (0.86)
Total housework time, household ^c													
								0.37 (0.40)	0.54 (0.54)	-0.91* (0.41)	-0.46 (0.30)	-0.45 (0.28)	
Total housework time, children ^c													
													-1.01 (1.98)
Constant	18.01*** (3.34)	74.54*** (6.09)	92.55*** (6.50)	1.39 (2.36)	6.05** (2.09)	7.44* (3.49)	99.99*** (7.58)	16.33*** (2.75)	72.37*** (3.70)	11.44*** (2.82)	4.21* (2.10)	7.20*** (1.94)	48.67*** (6.69)
N	1212	1212	1212	1212	1212	1212	1212	1199	1199	1199	1199	1199	767
R²	0.143	0.194	0.162	0.062	0.069	0.073	0.102	0.144	0.164	0.143	0.112	0.086	0.105

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S5. OLS-regression of time use for cleaning and laundry and shares between all household members on weekdays

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	0.50 (1.98)	1.90 (4.95)	2.40 (5.37)	1.66 (1.69)	5.85*** (1.62)	7.51** (2.55)	9.91 (6.21)	-1.16 (1.53)	-3.06 (2.20)	4.22* (1.74)	-0.16 (1.25)	4.38*** (1.26)	-13.68** (4.97)
Elder girl & younger boy	2.59 (1.99)	-3.85 (4.98)	-1.26 (5.40)	8.61*** (1.70)	1.82 (1.63)	10.43*** (2.57)	9.17 (6.25)	-0.29 (1.54)	-7.39*** (2.22)	7.73*** (1.76)	7.10*** (1.26)	0.64 (1.27)	16.15** (4.90)
Two girls	0.20 (2.01)	-1.46 (5.04)	-1.26 (5.47)	7.89*** (1.72)	5.24** (1.65)	13.13*** (2.60)	11.87+ (6.32)	-3.15* (1.56)	-6.07** (2.25)	9.26*** (1.78)	4.99*** (1.28)	4.30*** (1.29)	4.87 (4.85)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-1.70 (2.11)	22.60*** (5.28)	20.91*** (5.72)	-4.23* (1.81)	0.55 (1.73)	-3.69 (2.72)	17.22** (6.62)	-2.58 (1.63)	9.08*** (2.35)	-6.54*** (1.86)	-5.90*** (1.33)	-0.66 (1.34)	-7.95+ (4.58)
Male breadwinner	-3.74 (2.36)	64.55*** (5.91)	60.81*** (6.41)	-5.02* (2.02)	0.19 (1.93)	-4.83 (3.05)	55.98*** (7.41)	-6.40*** (1.88)	17.72*** (2.13)	-11.37*** (2.71)	-7.94*** (2.15)	-3.48* (1.54)	-5.29 (5.24)
Male not full-time	25.43*** (3.02)	18.32* (7.57)	43.75*** (8.21)	-2.10 (2.59)	5.63* (2.48)	3.53 (3.90)	47.28*** (9.49)	12.90*** (2.39)	-7.65* (3.44)	-5.26+ (2.72)	-4.72* (1.95)	-0.57 (1.96)	-5.60 (6.85)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	2.90 (1.91)	-6.78 (4.79)	-3.88 (5.20)	0.68 (1.64)	-1.14 (1.57)	-0.46 (2.47)	-4.34 (6.01)	4.15** (1.48)	-4.41* (2.13)	0.25 (1.69)	1.38 (1.21)	-1.14 (1.22)	1.08 (4.19)
2	2.44 (2.75)	-5.77 (6.88)	-3.33 (7.46)	2.19 (2.35)	-1.70 (2.25)	0.48 (3.55)	-2.84 (8.63)	1.92 (2.12)	0.28 (3.05)	-2.18 (2.42)	0.51 (1.73)	-2.69 (1.74)	3.64 (6.36)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	1.62 (1.48)	-4.89 (3.71)	-3.27 (4.03)	0.61 (1.27)	-0.81 (1.21)	-0.20 (1.91)	-3.47 (4.66)	3.09** (1.15)	-2.74+ (1.65)	-0.33 (1.31)	0.60 (0.94)	-0.92 (0.94)	2.26 (3.46)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	0.35 (1.79)	-12.88** (4.50)	-12.52* (4.88)	-0.96 (1.54)	-3.19* (1.47)	-4.15+ (2.32)	-16.68** (5.64)	1.43 (1.38)	0.17 (1.99)	-1.61 (1.58)	0.15 (1.13)	-1.79 (1.14)	0.70 (3.96)
2012/2013	3.80+ (1.97)	-19.20*** (4.92)	-15.39** (5.34)	-3.33* (1.69)	-5.97*** (1.61)	-9.30*** (2.54)	-24.69*** (6.18)	5.83*** (1.52)	-0.54 (2.19)	-5.29** (1.74)	-1.79 (1.24)	-3.52** (1.25)	5.83 (4.59)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	-1.51 (1.92)	-23.97*** (4.80)	-25.48*** (5.21)	0.42 (1.64)	1.23 (1.57)	1.65 (2.48)	-23.83*** (6.02)	3.31* (1.48)	-8.46*** (2.13)	5.15** (1.69)	2.07+ (1.21)	3.08* (1.22)	-1.76 (4.24)
Age of oldest child													
	-0.36 (0.30)	0.42 (0.75)	0.06 (0.81)	-0.07 (0.26)	0.39 (0.25)	0.32 (0.39)	0.38 (0.94)	-0.47* (0.23)	-0.01 (0.34)	0.48+ (0.27)	0.08 (0.19)	0.39* (0.19)	-0.96 (0.69)
Age difference (elder-younger)													
	-0.13 (0.44)	2.85** (1.09)	2.73* (1.19)	0.75* (0.37)	-0.20 (0.36)	0.55 (0.56)	3.27* (1.37)	-0.63+ (0.34)	0.95+ (0.49)	-0.31 (0.39)	0.14 (0.28)	-0.45 (0.28)	0.92 (1.03)
Total housework time, household ^c													
								-0.29 (0.39)	-0.07 (0.57)	0.36 (0.45)	0.02 (0.32)	0.34 (0.32)	
Total housework time, children ^c													0.21 (2.18)
Constant	11.38*** (3.24)	73.94*** (8.11)	85.32*** (8.79)	7.22** (2.77)	6.68* (2.65)	13.89*** (4.18)	99.21*** (10.17)	14.50*** (2.71)	70.92*** (3.91)	14.63*** (3.09)	8.57*** (2.22)	6.10** (2.23)	55.64*** (7.54)
N	1212	1212	1212	1212	1212	1212	1212	1192	1192	1192	1192	1192	669
R ²	0.095	0.171	0.139	0.048	0.037	0.047	0.111	0.111	0.112	0.085	0.084	0.045	0.078

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S6. OLS-regression of time use for grocery shopping and shares between all household members on weekdays

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	1.84 (2.31)	3.02 (3.16)	4.85 (4.31)	0.38 (2.40)	4.94* (2.09)	5.32 (3.48)	10.18 (6.38)	-0.19 (2.23)	-1.40 (2.65)	1.58 (2.34)	0.19 (1.91)	1.42 (1.66)	-7.13 (4.60)
Elder girl & younger boy	-2.40 (2.32)	1.96 (3.18)	-0.45 (4.33)	8.34*** (2.41)	-0.25 (2.10)	8.08* (3.50)	7.64 (6.42)	-1.31 (2.24)	-5.62* (2.67)	6.90** (2.35)	8.68*** (1.92)	-1.77 (1.67)	11.82** (4.57)
Two girls	2.92 (2.35)	1.70 (3.22)	4.62 (4.38)	8.34*** (2.44)	6.85** (2.12)	15.19*** (3.54)	19.81** (6.49)	-1.93 (2.28)	-6.16* (2.71)	8.11*** (2.39)	5.29** (1.95)	2.82+ (1.70)	2.02 (4.62)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-0.79 (2.46)	9.62** (3.37)	8.83+ (4.59)	-0.39 (2.56)	0.89 (2.22)	0.51 (3.71)	9.33 (6.80)	-3.37 (2.42)	7.24* (2.88)	-3.91 (2.54)	-2.88 (2.07)	-1.05 (1.80)	-2.50 (4.74)
Male breadwinner	-0.82 (2.75)	23.05*** (3.78)	22.23*** (5.14)	3.92 (2.86)	-0.45 (2.49)	3.47 (4.16)	25.70*** (7.62)	-7.54** (2.75)	16.06*** (2.88)	-8.57** (2.89)	-2.83 (2.06)	-5.76** (2.06)	4.23 (5.29)
Male not full-time	16.39*** (3.52)	11.10* (4.84)	27.49*** (6.59)	-0.19 (3.67)	-1.95 (3.19)	-2.14 (5.32)	25.35** (9.75)	13.79*** (3.50)	-0.42 (4.17)	-13.37*** (3.68)	-6.17* (3.00)	-7.25** (2.62)	-3.20 (6.87)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	1.80 (2.23)	-0.57 (3.06)	1.23 (4.17)	-0.90 (2.32)	1.63 (2.02)	0.73 (3.37)	1.96 (6.17)	1.05 (2.16)	-0.16 (2.58)	-0.90 (2.27)	-2.08 (1.85)	1.19 (1.61)	-5.30 (4.10)
2	-0.20 (3.20)	8.24+ (4.39)	8.05 (5.98)	-3.92 (3.33)	4.10 (2.90)	0.18 (4.84)	8.22 (8.86)	-1.52 (3.07)	8.01* (3.66)	-6.46* (3.22)	-6.64* (2.63)	0.21 (2.29)	-6.08 (5.80)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	0.90 (1.73)	2.32 (2.37)	3.22 (3.23)	-0.51 (1.80)	-0.38 (1.56)	-0.89 (2.61)	2.33 (4.78)	2.80+ (1.66)	-0.74 (1.97)	-2.05 (1.74)	-1.41 (1.42)	-0.65 (1.24)	-1.25 (3.27)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	4.43* (2.09)	2.87 (2.87)	7.30+ (3.91)	5.21* (2.18)	4.16* (1.89)	9.38** (3.16)	16.68** (5.79)	3.25 (2.03)	-7.04** (2.42)	3.79+ (2.13)	3.23+ (1.74)	0.57 (1.52)	3.71 (3.97)
2012/2013	7.22** (2.29)	4.20 (3.15)	11.42** (4.28)	6.38** (2.39)	4.24* (2.07)	10.62** (3.46)	22.05*** (6.35)	5.03* (2.22)	-7.28** (2.65)	2.24 (2.33)	3.76* (1.91)	-1.49 (1.66)	10.65* (4.39)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	1.18 (2.24)	-2.56 (3.07)	-1.38 (4.18)	2.38 (2.33)	0.36 (2.02)	2.74 (3.38)	1.36 (6.19)	0.93 (2.16)	-6.06* (2.58)	5.08* (2.27)	5.29** (1.86)	-0.19 (1.62)	6.93 (4.24)
Age of oldest child													
	-0.31 (0.35)	0.20 (0.48)	-0.11 (0.65)	0.85* (0.36)	0.27 (0.32)	1.12* (0.53)	1.01 (0.97)	-0.85* (0.34)	-1.16** (0.40)	2.01*** (0.35)	1.25*** (0.29)	0.76** (0.25)	0.50 (0.63)
Age difference (elder-younger)													
	0.29 (0.51)	-0.62 (0.70)	-0.33 (0.95)	0.13 (0.53)	-0.37 (0.46)	-0.24 (0.77)	-0.56 (1.41)	0.70 (0.49)	-0.10 (0.59)	-0.59 (0.52)	0.12 (0.42)	-0.71+ (0.37)	1.24 (0.93)
Total housework time, household ^c													
								0.85 (0.57)	-2.83*** (0.68)	1.98*** (0.59)	0.82+ (0.49)	1.15** (0.42)	
Total housework time, children ^c													
													-0.72 (2.08)
Constant	13.22*** (3.77)	24.23*** (5.18)	37.45*** (7.05)	-0.60 (3.93)	4.38 (3.41)	3.78 (5.70)	41.22*** (10.44)	21.72*** (4.03)	71.99*** (4.80)	6.37 (4.23)	-0.06 (3.45)	6.43* (3.01)	42.35*** (7.54)
N	1212	1212	1212	1212	1212	1212	1212	1147	1147	1147	1147	1147	728
R²	0.044	0.046	0.037	0.035	0.024	0.031	0.034	0.064	0.075	0.078	0.065	0.044	0.050

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S7. OLS-regression of time use for routine housework and shares between all household members on weekdays

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	6.15 (4.17)	-0.12 (7.73)	6.02 (8.52)	1.51 (3.55)	16.13*** (3.18)	17.64*** (5.27)	23.66* (10.52)	-0.08 (1.19)	-3.17+ (1.70)	3.25* (1.32)	-0.21 (0.98)	3.46*** (0.87)	-10.92*** (3.09)
Elder girl & younger boy	3.56 (4.20)	-7.09 (7.77)	-3.52 (8.57)	22.95*** (3.57)	1.38 (3.20)	24.32*** (5.30)	20.80* (10.58)	-0.77 (1.20)	-5.78*** (1.71)	6.52*** (1.32)	7.10*** (0.98)	-0.59 (0.87)	15.48*** (3.11)
Two girls	4.40 (4.25)	-6.75 (7.86)	-2.35 (8.67)	23.14*** (3.61)	20.54*** (3.24)	43.69*** (5.37)	41.34*** (10.70)	-2.06+ (1.22)	-7.38*** (1.73)	9.55*** (1.34)	5.47*** (1.00)	4.08*** (0.88)	4.29 (3.13)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-4.43 (4.45)	51.35*** (8.23)	46.92*** (9.08)	-4.50 (3.78)	1.23 (3.39)	-3.27 (5.62)	43.65*** (11.21)	-3.87** (1.28)	8.84*** (1.81)	-4.94*** (1.41)	-3.22** (1.05)	-1.67+ (0.93)	-2.42 (3.14)
Male breadwinner	-8.95+ (4.98)	143.49*** (9.22)	134.54*** (10.17)	-3.64 (4.24)	-2.26 (3.80)	-5.90 (6.30)	128.65*** (12.56)	-8.30*** (1.47)	19.58*** (2.10)	-11.18*** (1.62)	-6.24*** (1.21)	-4.92*** (1.07)	0.03 (3.54)
Male not full-time	72.23*** (6.38)	47.16*** (11.81)	119.39*** (13.03)	-3.23 (5.43)	5.37 (4.86)	2.13 (8.06)	121.52*** (16.08)	14.35*** (1.86)	-6.06* (2.65)	-8.28*** (2.05)	-4.86** (1.52)	-3.37* (1.35)	-5.97 (4.60)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	7.82+ (4.04)	-8.57 (7.48)	-0.75 (8.24)	-1.97 (3.44)	0.55 (3.08)	-1.43 (5.10)	-2.17 (10.18)	2.80* (1.15)	-1.96 (1.64)	-0.85 (1.27)	0.04 (0.94)	-0.84 (0.84)	-0.66 (2.86)
2	6.98 (5.80)	15.78 (10.73)	22.75+ (11.84)	-6.85 (4.93)	1.00 (4.42)	-5.85 (7.33)	16.90 (14.61)	0.87 (1.65)	3.43 (2.35)	-4.27* (1.82)	-2.78* (1.36)	-1.42 (1.20)	-1.39 (4.15)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	5.31+ (3.13)	-6.89 (5.79)	-1.58 (6.39)	1.46 (2.66)	-2.30 (2.38)	-0.83 (3.95)	-2.41 (7.89)	2.65** (0.89)	-2.58* (1.27)	-0.05 (0.98)	0.64 (0.73)	-0.71 (0.65)	2.03 (2.24)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	4.70 (3.79)	-23.11** (7.01)	-18.41* (7.74)	4.17 (3.22)	-1.47 (2.89)	2.70 (4.79)	-15.71 (9.55)	1.75 (1.08)	-3.30* (1.54)	1.60 (1.19)	1.74+ (0.89)	-0.17 (0.79)	3.19 (2.69)
2012/2013	16.17*** (4.15)	-38.22*** (7.68)	-22.04** (8.47)	3.89 (3.53)	-3.59 (3.16)	0.30 (5.24)	-21.75* (10.46)	5.08*** (1.19)	-5.50** (1.69)	0.44 (1.31)	1.48 (0.97)	-1.03 (0.86)	5.49+ (2.96)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	1.95 (4.05)	-37.25*** (7.49)	-35.30*** (8.27)	7.34* (3.44)	5.58+ (3.09)	12.92* (5.12)	-22.37* (10.20)	1.38 (1.16)	-7.79*** (1.64)	6.43*** (1.27)	4.10*** (0.95)	2.34** (0.84)	2.46 (2.87)
Age of oldest child													
	-1.71** (0.63)	-1.08 (1.17)	-2.79* (1.29)	1.50** (0.54)	0.89+ (0.48)	2.39** (0.80)	-0.40 (1.59)	-0.59** (0.18)	-0.44+ (0.26)	1.03*** (0.20)	0.60*** (0.15)	0.43*** (0.13)	-0.14 (0.45)
Age difference (elder-younger)													
	0.26 (0.92)	6.14*** (1.70)	6.40*** (1.88)	0.85 (0.78)	-0.98 (0.70)	-0.13 (1.16)	6.27** (2.32)	-0.17 (0.26)	0.75* (0.37)	-0.58* (0.29)	-0.08 (0.22)	-0.50** (0.19)	0.89 (0.66)
Total housework time, household ^c													
								0.19 (0.30)	-0.99* (0.43)	0.80* (0.33)	0.36 (0.25)	0.44* (0.22)	
Total housework time, children ^c													0.01 (1.51)
Constant	42.44*** (6.83)	173.58*** (12.65)	216.02*** (13.95)	8.26 (5.81)	17.78*** (5.21)	26.03** (8.63)	242.05*** (17.22)	18.19*** (2.11)	71.03*** (3.01)	10.68*** (2.33)	3.57* (1.73)	7.10*** (1.53)	46.39*** (4.98)
N	1212	1212	1212	1212	1212	1212	1212	1212	1212	1212	1212	1212	1061
R²	0.167	0.261	0.210	0.081	0.062	0.072	0.144	0.175	0.177	0.141	0.132	0.082	0.083

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S8. OLS-regression of time use for repairs, car and administration (= non-routine housework) and shares between all household members on weekdays

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	1.65 (2.45)	1.48 (1.07)	3.13 (2.89)	0.93 (0.79)	-1.33 (1.23)	-0.41 (1.50)	2.72 (3.42)	-0.46 (4.58)	1.88 (4.22)	-1.44 (3.87)	4.44 (3.25)	-5.88* (2.63)	13.99+ (8.11)
Elder girl & younger boy	5.80* (2.46)	1.48 (1.08)	7.28* (2.91)	-0.99 (0.79)	0.90 (1.23)	-0.10 (1.51)	7.18* (3.43)	6.80 (4.68)	-1.85 (4.31)	-4.93 (3.95)	-1.82 (3.32)	-3.10 (2.68)	0.09 (8.47)
Two girls	1.05 (2.49)	-0.17 (1.09)	0.88 (2.94)	-1.38+ (0.80)	-2.31+ (1.25)	-3.68* (1.53)	-2.81 (3.48)	8.05+ (4.86)	2.26 (4.48)	-10.30* (4.11)	-3.17 (3.45)	-7.13* (2.79)	14.21 (9.25)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	0.00 (2.61)	2.70* (1.14)	2.70 (3.08)	-1.38+ (0.84)	0.26 (1.31)	-1.12 (1.60)	1.58 (3.64)	3.58 (5.06)	6.82 (4.66)	-10.39* (4.27)	-10.05** (3.59)	-0.35 (2.90)	-12.45 (8.43)
Male breadwinner	-0.78 (2.93)	2.38+ (1.28)	1.60 (3.45)	-2.02* (1.46)	-0.71 (1.46)	-2.73 (1.80)	-1.13 (4.08)	-2.41 (5.68)	14.08** (5.23)	-11.69* (4.80)	-8.94* (4.03)	-2.75 (3.26)	-5.92 (9.26)
Male not full-time	8.71* (3.75)	0.18 (1.64)	8.89* (4.42)	-1.49 (1.20)	-1.47 (1.88)	-2.96 (2.30)	5.93 (5.22)	28.13*** (7.23)	-6.30 (6.66)	-21.83*** (6.11)	-13.62** (5.13)	-8.20* (4.15)	7.37 (16.73)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	-0.41 (2.37)	-2.34* (1.04)	-2.75 (2.79)	0.04 (0.76)	-2.09+ (1.19)	-2.05 (1.46)	-4.80 (3.30)	9.43* (4.44)	-8.18* (4.09)	-1.24 (3.75)	4.27 (3.15)	-5.51* (2.55)	13.56+ (8.18)
2	-2.36 (3.40)	-1.65 (1.49)	-4.01 (4.01)	0.90 (1.09)	-0.06 (1.70)	0.84 (2.09)	-3.18 (4.74)	-8.25 (6.30)	-4.19 (5.80)	12.46* (5.32)	10.38* (4.47)	2.05 (3.61)	4.56 (10.21)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	-5.91** (1.84)	-1.51+ (0.80)	-7.43*** (2.17)	-0.26 (0.59)	-0.35 (0.92)	-0.61 (1.13)	-8.04** (2.56)	-1.93 (3.52)	2.64 (3.25)	-0.72 (2.97)	0.31 (2.50)	-1.03 (2.02)	0.11 (6.69)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	-1.00 (2.22)	-1.57 (0.97)	-2.57 (2.62)	-2.47*** (0.71)	-0.88 (1.11)	-3.35* (1.37)	-5.93+ (3.10)	7.28+ (4.01)	-5.57 (3.70)	-1.75 (3.39)	-2.58 (2.85)	0.83 (2.30)	-0.78 (7.16)
2012/2013	-2.34 (2.44)	-1.47 (1.07)	-3.81 (2.87)	-3.52*** (0.78)	-2.07+ (1.22)	-5.59*** (1.50)	-9.39** (3.40)	8.99+ (4.85)	-0.08 (4.46)	-8.92* (4.09)	-9.35** (3.44)	0.43 (2.78)	-13.66 (9.91)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	1.88 (2.38)	2.02+ (1.04)	3.89 (2.80)	0.52 (0.76)	1.35 (1.19)	1.87 (1.46)	5.76+ (3.31)	5.47 (4.35)	-2.14 (4.01)	-3.29 (3.67)	-4.46 (3.08)	1.17 (2.50)	-3.94 (7.63)
Age of oldest child													
	-0.43 (0.37)	0.17 (0.16)	-0.27 (0.44)	0.21+ (0.12)	0.30 (0.19)	0.51* (0.23)	0.24 (0.52)	-1.83* (0.73)	0.27 (0.67)	1.56* (0.62)	0.35 (0.52)	1.21** (0.42)	-1.02 (1.27)
Age difference (elder-younger)													
	0.33 (0.54)	-0.07 (0.24)	0.26 (0.64)	0.10 (0.17)	-0.41 (0.27)	-0.31 (0.33)	-0.05 (0.75)	-0.51 (1.05)	0.37 (0.97)	0.15 (0.89)	0.94 (0.74)	-0.80 (0.60)	3.52+ (1.88)
Total housework time, household ^c													
								2.32* (1.16)	-3.20** (1.07)	0.87 (0.98)	0.27 (0.83)	0.60 (0.67)	
Total housework time, children ^c													
													-3.76 (3.73)
Constant	14.88*** (4.01)	3.09+ (1.75)	17.97*** (4.73)	4.28*** (1.29)	4.08* (2.01)	8.36*** (2.46)	26.32*** (5.59)	41.63*** (8.38)	34.86*** (7.72)	23.55*** (7.07)	17.26** (5.94)	6.30 (4.81)	59.88*** (13.08)
N	1212	1212	1212	1212	1212	1212	1212	648	648	648	648	648	229
R²	0.026	0.020	0.026	0.053	0.018	0.038	0.030	0.098	0.052	0.101	0.076	0.055	0.103

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S9. OLS-regression of time use for total housework and shares between all household members on weekends

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	5.01 (7.69)	-0.54 (9.86)	4.47 (13.87)	3.69 (5.89)	31.59*** (5.74)	35.28*** (9.07)	39.75* (18.45)	-1.20 (1.74)	-3.84+ (2.06)	5.08** (1.83)	-0.51 (1.34)	5.55*** (1.24)	-14.50*** (3.49)
Elder girl & younger boy	-0.39 (7.72)	-9.26 (9.90)	-9.66 (13.92)	31.37*** (5.91)	7.93 (5.77)	39.30*** (9.10)	29.64 (18.52)	-1.99 (1.75)	-5.50** (2.07)	7.53*** (1.83)	6.64*** (1.34)	0.85 (1.24)	10.68** (3.52)
Two girls	6.65 (7.83)	-3.51 (10.05)	3.14 (14.13)	32.13*** (6.00)	24.60*** (5.85)	56.74*** (9.24)	59.88** (18.80)	-2.55 (1.78)	-5.28* (2.11)	7.86*** (1.87)	4.99*** (1.37)	2.83* (1.26)	4.46 (3.56)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-10.70 (8.28)	3.62 (10.63)	-7.08 (14.94)	-5.75 (6.35)	-0.83 (6.19)	-6.58 (9.77)	-13.66 (19.88)	-2.87 (1.87)	4.34+ (2.22)	-1.55 (1.96)	-0.73 (1.43)	-0.84 (1.33)	-1.63 (3.64)
Male breadwinner	-4.87 (9.51)	13.42 (12.20)	8.55 (17.16)	-4.04 (7.29)	-5.61 (7.11)	-9.65 (11.22)	-1.10 (22.83)	-2.34 (2.15)	5.46* (2.54)	-3.12 (2.25)	-0.99 (1.65)	-2.13 (1.52)	-2.22 (4.16)
Male not full-time	-9.53 (11.37)	3.25 (14.58)	-6.28 (20.50)	-5.81 (8.71)	-12.41 (8.49)	-18.22 (13.41)	-24.50 (27.27)	-1.07 (2.58)	6.35* (3.05)	-5.33* (2.70)	-1.17 (1.97)	-4.18* (1.83)	3.71 (5.14)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	3.13 (7.61)	-0.69 (9.76)	2.44 (13.72)	12.08* (5.83)	6.07 (5.68)	18.16* (8.97)	20.60 (18.25)	0.01 (1.72)	-1.46 (2.04)	1.51 (1.81)	2.38+ (1.32)	-0.83 (1.22)	-0.71 (3.30)
2	-6.69 (10.82)	10.15 (13.89)	3.46 (19.52)	10.66 (8.29)	15.55+ (8.09)	26.21* (12.77)	29.67 (25.97)	-2.58 (2.46)	1.19 (2.90)	1.43 (2.57)	0.40 (1.88)	1.01 (1.74)	-6.11 (4.77)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	9.57+ (5.70)	-2.49 (7.32)	7.07 (10.28)	-3.49 (4.37)	-5.33 (4.26)	-8.82 (6.73)	-1.75 (13.68)	2.58* (1.29)	-1.88 (1.53)	-0.72 (1.35)	-0.10 (0.99)	-0.60 (0.91)	3.75 (2.53)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	0.70 (8.52)	-25.31* (10.94)	-24.62 (15.37)	-5.54 (6.53)	-18.48** (6.37)	-24.01* (10.05)	-48.63* (20.45)	2.71 (1.93)	-1.31 (2.28)	-1.32 (2.02)	0.59 (1.48)	-1.92 (1.37)	4.41 (3.62)
2012/2013	7.40 (8.97)	-49.10*** (11.51)	-41.70* (16.18)	-1.73 (6.87)	-14.58* (6.70)	-16.31 (10.58)	-58.01** (21.52)	6.19** (2.04)	-7.41** (2.41)	1.28 (2.13)	2.51 (1.56)	-1.23 (1.44)	4.50 (3.84)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	7.93 (7.52)	14.09 (9.65)	22.02 (13.56)	9.25 (5.76)	14.23* (5.62)	23.48** (8.87)	45.50* (18.04)	-1.42 (1.70)	-0.07 (2.02)	1.51 (1.78)	0.17 (1.30)	1.33 (1.21)	0.44 (3.27)
Age of oldest child													
	-0.89 (1.13)	1.02 (1.45)	0.13 (2.04)	0.38 (0.87)	0.25 (0.85)	0.63 (1.33)	0.76 (2.72)	-0.41 (0.26)	-0.24 (0.31)	0.64* (0.27)	0.36+ (0.20)	0.28 (0.18)	0.94+ (0.49)
Age difference (elder-younger)													
	1.76 (1.70)	2.97 (2.18)	4.73 (3.06)	1.38 (1.30)	-1.52 (1.27)	-0.14 (2.00)	4.60 (4.07)	0.01 (0.39)	0.26 (0.46)	-0.29 (0.40)	0.08 (0.29)	-0.37 (0.27)	-0.04 (0.76)
Total housework time, household ^c								0.69* (0.30)	-1.88*** (0.36)	1.19*** (0.31)	0.57* (0.23)	0.62** (0.21)	
Total housework time, children ^c													0.61 (1.19)
Constant	83.56*** (13.31)	191.25*** (17.07)	274.81*** (24.00)	29.66** (10.20)	47.50*** (9.94)	77.16*** (15.70)	351.97*** (31.93)	22.97*** (3.20)	63.95*** (3.78)	13.15*** (3.35)	3.99 (2.45)	9.21*** (2.27)	39.60*** (5.95)
N	1005	1005	1005	1005	1005	1005	1005	1001	1001	1001	1001	1001	846
R²	0.016	0.037	0.020	0.066	0.065	0.067	0.038	0.037	0.065	0.064	0.067	0.053	0.079

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S10. OLS-regression of time use for cooking and dishes and shares between all household members on weekends

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	-3.78 (3.71)	-5.60 (5.39)	-9.38 (6.80)	-0.42 (2.94)	10.70*** (2.38)	10.29* (4.09)	0.90 (8.35)	-2.17 (2.30)	-6.09* (2.76)	8.28*** (2.15)	1.25 (1.63)	7.05*** (1.43)	-16.17*** (4.88)
Elder girl & younger boy	-3.41 (3.72)	-8.81 (5.41)	-12.22+ (6.82)	12.55*** (2.96)	2.55 (2.38)	15.09*** (4.10)	2.87 (8.38)	-2.11 (2.31)	-8.38** (2.79)	10.51*** (2.17)	8.55*** (1.64)	1.98 (1.44)	18.16*** (4.88)
Two girls	-0.64 (3.78)	-12.56* (5.49)	-13.20+ (6.93)	16.01*** (3.00)	9.20*** (2.42)	25.22*** (4.16)	12.02 (8.51)	-1.28 (2.34)	-11.26*** (2.82)	12.52*** (2.20)	8.44*** (1.66)	4.13** (1.46)	8.82+ (4.90)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-3.34 (4.00)	-1.47 (5.81)	-4.80 (7.32)	-0.14 (3.17)	-3.36 (2.56)	-3.50 (4.40)	-8.30 (9.00)	-1.85 (2.46)	3.26 (2.97)	-1.40 (2.31)	-0.13 (1.75)	-1.29 (1.54)	3.71 (4.81)
Male breadwinner	-0.93 (4.59)	10.22 (6.67)	9.29 (8.41)	-2.59 (3.64)	-7.39* (2.94)	-9.98* (5.06)	-0.70 (10.33)	1.02 (2.82)	5.50 (3.39)	-6.51* (2.64)	-1.80 (2.00)	-4.71** (1.76)	8.05 (5.65)
Male not full-time	-0.70 (5.48)	5.81 (7.97)	5.11 (10.05)	-4.63 (4.35)	-7.43* (3.51)	-12.06* (6.04)	-6.95 (12.34)	1.55 (3.38)	4.14 (4.08)	-5.64+ (3.18)	-1.41 (2.40)	-4.25* (2.11)	9.42 (6.83)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	-2.91 (3.67)	-7.35 (5.33)	-10.26 (6.72)	-0.28 (2.91)	-1.14 (2.35)	-1.42 (4.04)	-11.68 (8.26)	-0.10 (2.27)	1.57 (2.73)	-1.47 (2.13)	-0.04 (1.61)	-1.42 (1.41)	-2.05 (4.41)
2	-2.24 (5.22)	-8.26 (7.59)	-10.50 (9.57)	-3.54 (4.14)	-4.12 (3.34)	-7.66 (5.75)	-18.16 (11.75)	0.46 (3.23)	4.20 (3.89)	-4.70 (3.03)	-1.69 (2.30)	-3.00 (2.02)	1.29 (6.44)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	4.58+ (2.75)	0.18 (4.00)	4.77 (5.04)	-0.67 (2.18)	-1.76 (1.76)	-2.43 (3.03)	2.34 (6.19)	3.25+ (1.70)	-3.52+ (2.05)	0.26 (1.60)	0.67 (1.21)	-0.44 (1.06)	3.74 (3.42)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	2.65 (4.11)	-9.03 (5.98)	-6.39 (7.53)	-4.15 (3.26)	-2.37 (2.63)	-6.52 (4.53)	-12.91 (9.26)	2.97 (2.51)	-0.47 (3.02)	-2.52 (2.35)	-1.26 (1.78)	-1.23 (1.57)	0.55 (4.68)
2012/2013	5.16 (4.33)	-30.68*** (6.29)	-25.52** (7.93)	-2.24 (3.43)	-3.11 (2.77)	-5.34 (4.77)	-30.87** (9.74)	6.59* (2.65)	-7.64* (3.19)	1.00 (2.48)	1.59 (1.88)	-0.57 (1.65)	3.05 (5.02)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	7.18* (3.63)	11.65* (5.27)	18.83** (6.65)	4.22 (2.88)	3.25 (2.32)	7.47+ (4.00)	26.30** (8.16)	-1.77 (2.22)	-0.85 (2.67)	2.63 (2.08)	0.53 (1.58)	2.07 (1.39)	-1.34 (4.39)
Age of oldest child													
	-0.79 (0.55)	0.91 (0.79)	0.12 (1.00)	0.53 (0.43)	0.52 (0.35)	1.05+ (0.60)	1.17 (1.23)	-0.86* (0.34)	-0.17 (0.41)	1.03** (0.32)	0.57* (0.24)	0.45* (0.21)	0.79 (0.66)
Age difference (elder-younger)													
	-0.16 (0.82)	1.39 (1.19)	1.23 (1.50)	0.28 (0.65)	-0.77 (0.52)	-0.48 (0.90)	0.74 (1.84)	-0.29 (0.50)	0.80 (0.60)	-0.52 (0.47)	-0.20 (0.36)	-0.31 (0.31)	-0.64 (1.00)
Total housework time, household ^c													
								0.06 (0.40)	-0.43 (0.48)	0.37 (0.37)	0.14 (0.28)	0.23 (0.25)	
Total housework time, children ^c													
													0.14 (1.59)
Constant	33.71*** (6.42)	89.08*** (9.33)	122.78*** (11.76)	8.50+ (5.10)	13.93*** (4.11)	22.43** (7.07)	145.22*** (14.45)	24.85*** (4.19)	66.42*** (5.04)	8.80* (3.93)	2.80 (2.97)	6.02* (2.61)	38.77*** (8.00)
N	1005	1005	1005	1005	1005	1005	1005	968	968	968	968	968	589
R²	0.023	0.060	0.042	0.056	0.046	0.055	0.037	0.036	0.046	0.069	0.061	0.051	0.112

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S11. OLS-regression of time use for cleaning and laundry and shares between all household members on weekends

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	5.18 (3.33)	-1.94 (6.55)	3.24 (7.79)	0.83 (3.23)	11.06*** (3.33)	11.89* (5.10)	15.13 (10.03)	3.07 (2.25)	-6.79* (2.97)	3.71 (2.57)	-0.85 (1.97)	4.57* (1.77)	-15.25** (5.15)
Elder girl & younger boy	1.95 (3.34)	-6.29 (6.58)	-4.35 (7.82)	14.85*** (3.25)	1.32 (3.34)	16.17** (5.12)	11.82 (10.07)	-0.96 (2.28)	-6.75* (3.00)	7.71** (2.60)	8.58*** (1.99)	-0.86 (1.79)	18.75*** (5.20)
Two girls	2.95 (3.39)	0.32 (6.68)	3.27 (7.93)	13.88*** (3.30)	6.33+ (3.39)	20.21*** (5.19)	23.48* (10.22)	-1.30 (2.29)	-7.29* (3.02)	8.57** (2.62)	6.95*** (2.00)	1.62 (1.80)	8.52+ (5.16)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-10.30** (3.59)	5.35 (7.06)	-4.95 (8.39)	-3.65 (3.48)	-2.03 (3.58)	-5.68 (5.49)	-10.64 (10.81)	-8.27*** (2.41)	10.84*** (3.17)	-2.57 (2.75)	-1.20 (2.10)	-1.40 (1.89)	2.48 (5.18)
Male breadwinner	-9.84* (4.12)	-1.36 (8.11)	-11.20 (9.63)	-8.82* (4.00)	-4.79 (4.12)	-13.61* (6.31)	-24.81* (12.41)	-6.45* (2.77)	11.86** (3.65)	-5.44+ (3.16)	-3.82 (2.42)	-1.61 (2.18)	-6.26 (5.93)
Male not full-time	-5.27 (4.92)	4.26 (9.69)	-1.01 (11.51)	0.96 (4.78)	-5.99 (4.92)	-5.04 (7.53)	-6.05 (14.83)	-4.45 (3.31)	7.52+ (4.36)	-3.02 (3.78)	0.14 (2.89)	-3.20 (2.60)	5.12 (7.26)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	4.88 (3.29)	4.45 (6.48)	9.33 (7.70)	6.46* (3.20)	4.55 (3.29)	11.01* (5.04)	20.34* (9.92)	1.63 (2.21)	-6.08* (2.52)	4.44+ (2.91)	4.35* (1.93)	0.12 (1.74)	3.05 (4.65)
2	-0.37 (4.69)	14.82 (9.22)	14.45 (10.96)	8.57+ (4.55)	8.53+ (4.68)	17.10* (7.17)	31.55* (14.12)	-0.47 (3.16)	-1.48 (4.16)	1.96 (3.61)	1.61 (2.76)	0.39 (2.49)	-0.81 (7.00)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	4.59+ (2.47)	-2.28 (4.86)	2.31 (5.77)	0.01 (2.40)	-2.27 (2.47)	-2.26 (3.78)	0.06 (7.44)	1.04 (1.68)	-0.76 (2.21)	-0.28 (1.91)	0.73 (1.46)	-1.00 (1.32)	8.17* (3.66)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	-3.48 (3.69)	-15.32* (7.26)	-18.80* (8.63)	-1.98 (3.59)	-10.33** (3.69)	-12.31* (5.65)	-31.11** (11.12)	2.09 (2.45)	-2.15 (3.22)	0.08 (2.79)	0.90 (2.14)	-0.84 (1.92)	-2.48 (4.98)
2012/2013	1.57 (3.88)	-21.99** (7.64)	-20.41* (9.08)	-3.76 (3.77)	-12.19** (3.88)	-15.94** (5.94)	-36.36** (11.70)	7.86** (2.59)	-6.70* (3.41)	-1.16 (2.95)	1.64 (2.26)	-2.79 (2.03)	0.10 (5.43)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	2.07 (3.26)	5.77 (6.41)	7.84 (7.61)	1.56 (3.16)	6.33+ (3.25)	7.90 (4.98)	15.74 (9.81)	-1.99 (2.18)	-0.58 (2.87)	2.54 (2.48)	1.27 (1.90)	1.30 (1.71)	1.11 (4.50)
Age of oldest child													
	-0.14 (0.49)	0.46 (0.96)	0.32 (1.15)	-0.55 (0.48)	-0.34 (0.49)	-0.90 (0.75)	-0.58 (1.48)	-0.42 (0.33)	0.44 (0.44)	-0.02 (0.38)	-0.13 (0.29)	0.11 (0.26)	-0.46 (0.73)
Age difference (elder-younger)													
	0.58 (0.73)	1.21 (1.45)	1.79 (1.72)	0.40 (0.71)	-0.26 (0.73)	0.15 (1.12)	1.94 (2.21)	0.19 (0.50)	-0.61 (0.66)	0.42 (0.57)	0.58 (0.44)	-0.15 (0.39)	0.82 (1.07)
Total housework time, household ^c													
								-0.02 (0.39)	-1.39** (0.51)	1.41** (0.45)	0.93** (0.34)	0.48 (0.31)	
Total housework time, children ^c													0.50 (1.66)
Constant	23.39*** (5.76)	80.56*** (11.34)	103.95*** (13.48)	16.66** (5.60)	26.07*** (5.76)	42.73*** (8.82)	146.68*** (17.36)	20.37*** (4.10)	66.19*** (5.40)	13.44** (4.68)	2.98 (3.58)	10.47** (3.22)	43.22*** (8.57)
N	1005	1005	1005	1005	1005	1005	1005	934	934	934	934	934	550
R²	0.027	0.024	0.021	0.048	0.041	0.044	0.039	0.034	0.046	0.043	0.061	0.025	0.104

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S12. OLS-regression of time use for grocery shopping and shares between all household members on weekends

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	2.88 (3.69)	5.61 (4.39)	8.50 (7.24)	3.73 (3.19)	8.30* (3.49)	12.03* (5.33)	20.52+ (10.93)	-1.03 (4.20)	-6.94+ (4.14)	7.99+ (4.10)	1.00 (3.07)	7.01* (3.15)	-6.02 (7.55)
Elder girl & younger boy	-2.90 (3.71)	2.77 (4.41)	-0.12 (7.26)	7.08* (3.20)	1.15 (3.50)	8.24 (5.35)	8.11 (10.97)	-2.18 (4.16)	-6.33 (4.10)	8.53* (4.05)	7.34* (3.04)	1.22 (3.11)	3.74 (7.53)
Two girls	0.59 (3.76)	7.02 (4.47)	7.61 (7.37)	6.65* (3.25)	10.34** (3.55)	16.99** (5.43)	24.59* (11.14)	-5.20 (4.31)	-2.87 (4.24)	8.12+ (4.20)	2.95 (3.15)	5.17 (3.23)	-4.86 (7.47)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	1.67 (3.98)	-2.93 (4.73)	-1.26 (7.80)	-3.30 (3.44)	5.89 (3.76)	2.59 (5.75)	1.32 (11.77)	4.55 (4.63)	-4.32 (4.56)	-0.32 (4.51)	-3.18 (3.39)	2.84 (3.47)	-5.61 (7.98)
Male breadwinner	7.27 (4.57)	4.77 (5.43)	12.04 (8.95)	5.87 (3.95)	7.21+ (4.31)	13.08* (6.60)	25.12+ (13.52)	1.47 (5.17)	-3.41 (5.10)	1.89 (5.04)	2.28 (3.78)	-0.41 (3.87)	5.44 (8.56)
Male not full-time	2.04 (5.46)	-7.23 (6.49)	-5.19 (10.70)	-0.82 (4.72)	2.97 (5.15)	2.15 (7.88)	-3.04 (16.16)	6.31 (6.36)	-8.51 (6.26)	2.15 (6.20)	3.64 (4.65)	-1.48 (4.76)	3.90 (11.36)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	-2.16 (3.65)	2.97 (4.34)	0.81 (7.16)	0.84 (3.16)	3.76 (3.45)	4.61 (5.28)	5.42 (10.81)	3.67 (4.07)	0.55 (4.01)	-4.22 (3.97)	-2.76 (2.98)	-1.42 (3.05)	-0.81 (6.63)
2	-1.72 (5.20)	3.79 (6.18)	2.07 (10.19)	3.65 (4.49)	4.70 (4.91)	8.35 (7.51)	10.41 (15.38)	-8.50 (5.92)	6.27 (5.83)	2.26 (5.77)	-3.23 (4.33)	5.52 (4.43)	-6.89 (9.30)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	1.35 (2.74)	0.26 (3.26)	1.60 (5.37)	0.17 (2.37)	-0.46 (2.59)	-0.29 (3.95)	1.31 (8.10)	1.63 (3.15)	-4.70 (3.10)	3.08 (3.07)	3.69 (2.30)	-0.62 (2.36)	8.66 (5.38)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	2.52 (4.10)	3.99 (4.87)	6.51 (8.02)	4.27 (3.54)	0.14 (3.86)	4.40 (5.91)	10.91 (12.11)	2.39 (4.57)	-0.42 (4.51)	-2.03 (4.46)	4.91 (3.35)	-6.93* (3.43)	7.99 (7.48)
2012/2013	10.37* (4.31)	9.37+ (5.12)	19.73* (8.44)	5.68 (3.72)	5.98 (4.07)	11.66+ (6.22)	31.39* (12.75)	5.81 (4.77)	1.61 (4.70)	-7.47 (4.65)	-0.42 (3.49)	-7.00+ (3.57)	1.08 (7.95)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	-1.76 (3.61)	-3.19 (4.29)	-4.94 (7.08)	1.80 (3.12)	3.62 (3.41)	5.42 (5.21)	0.48 (10.69)	1.59 (4.35)	-2.73 (4.29)	1.15 (4.25)	1.95 (3.18)	-0.82 (3.26)	8.00 (7.53)
Age of oldest child													
	-0.01 (0.54)	-0.41 (0.65)	-0.42 (1.07)	0.11 (0.47)	-0.14 (0.51)	-0.03 (0.78)	-0.44 (1.61)	0.07 (0.60)	-1.46* (0.60)	1.39* (0.59)	1.59*** (0.44)	-0.20 (0.45)	2.02* (0.96)
Age difference (elder-younger)													
	0.74 (0.82)	0.15 (0.97)	0.89 (1.60)	0.23 (0.70)	-0.36 (0.77)	-0.14 (1.18)	0.75 (2.41)	0.68 (0.96)	-0.39 (0.95)	-0.30 (0.94)	-0.65 (0.70)	0.35 (0.72)	-1.01 (1.55)
Total housework time, household ^c													
								-1.11 (0.70)	-0.08 (0.69)	1.18+ (0.69)	0.28 (0.51)	0.89+ (0.53)	
Total housework time, children ^c													
													0.48 (2.29)
Constant													
	11.10+ (6.39)	19.89** (7.60)	30.99* (12.53)	1.89 (5.52)	0.86 (6.03)	2.75 (9.23)	33.75+ (18.91)	29.89*** (7.68)	58.61*** (7.57)	11.59 (7.48)	-1.42 (5.62)	13.03* (5.75)	32.05* (12.88)
N	1005	1005	1005	1005	1005	1005	1005	611	611	611	611	611	309
R ²	0.019	0.013	0.017	0.020	0.021	0.021	0.021	0.029	0.030	0.043	0.057	0.032	0.056

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S13. OLS-regression of time use for routine housework and shares between all household members on weekends

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	4.67 (6.55)	-1.44 (9.80)	3.23 (12.73)	4.18 (5.54)	29.95*** (5.41)	34.13*** (8.52)	37.36* (17.00)	-1.13 (1.73)	-4.58* (2.14)	5.75** (1.87)	-0.38 (1.39)	6.09*** (1.26)	-16.97*** (3.58)
Elder girl & younger boy	-4.25 (6.57)	-11.11 (9.84)	-15.36 (12.77)	34.17*** (5.56)	4.77 (5.43)	38.94*** (8.55)	23.57 (17.07)	-2.59 (1.74)	-6.45** (2.15)	9.02*** (1.88)	7.97*** (1.39)	1.04 (1.27)	11.81** (3.58)
Two girls	3.04 (6.67)	-4.43 (9.99)	-1.38 (12.97)	36.52*** (5.65)	25.86*** (5.51)	62.38*** (8.68)	60.99*** (17.33)	-2.77 (1.77)	-7.09** (2.19)	9.86*** (1.91)	6.18*** (1.42)	3.66** (1.29)	4.29 (3.62)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	-12.35+ (7.06)	2.22 (10.56)	-10.13 (13.71)	-7.20 (5.97)	0.66 (5.83)	-6.53 (9.18)	-16.66 (18.32)	-2.81 (1.86)	4.55* (2.30)	-1.77 (2.01)	-1.30 (1.49)	-0.51 (1.35)	-1.69 (3.70)
Male breadwinner	-3.47 (8.10)	12.81 (12.13)	9.35 (15.75)	-5.39 (6.69)	-4.80 (6.86)	-10.18 (10.54)	-0.83 (21.04)	-1.71 (2.13)	5.36* (2.64)	-3.63 (2.31)	-1.81 (1.71)	-1.83 (1.55)	-3.21 (4.22)
Male not full-time	-3.63 (9.68)	3.76 (14.49)	0.13 (18.81)	-4.41 (8.20)	-10.29 (7.99)	-14.71 (12.59)	-14.58 (25.14)	-0.02 (2.56)	5.48+ (3.16)	-5.48* (2.76)	-1.65 (2.05)	-3.85* (1.86)	3.19 (5.22)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	-0.22 (6.48)	-0.67 (9.70)	-0.89 (12.59)	7.13 (5.48)	7.14 (5.35)	14.27+ (8.42)	13.37 (16.82)	0.29 (1.71)	-1.60 (2.12)	1.37 (1.85)	1.89 (1.37)	-0.51 (1.25)	-1.08 (3.35)
2	-3.75 (9.22)	9.20 (13.80)	5.45 (17.91)	9.00 (7.80)	8.58 (7.61)	17.58 (11.99)	23.03 (23.94)	-1.49 (2.44)	0.36 (3.01)	1.23 (2.64)	1.06 (1.95)	0.14 (1.78)	-4.38 (4.89)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	10.89* (4.86)	-2.65 (7.27)	8.24 (9.44)	-0.41 (4.11)	-4.66 (4.01)	-5.07 (6.32)	3.17 (12.61)	2.71* (1.28)	-2.47 (1.58)	-0.23 (1.38)	0.60 (1.03)	-0.84 (0.93)	5.30* (2.57)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	0.78 (7.26)	-24.90* (10.87)	-24.11+ (14.11)	-2.09 (6.15)	-13.10* (6.00)	-15.20 (9.44)	-39.31* (18.85)	2.25 (1.92)	-1.54 (2.37)	-0.68 (2.07)	0.98 (1.54)	-1.66 (1.40)	3.52 (3.67)
2012/2013	15.68* (7.64)	-48.60*** (11.44)	-32.92* (14.85)	-0.67 (6.47)	-10.03 (6.31)	-10.70 (9.93)	-43.62* (19.84)	6.91*** (2.02)	-8.38*** (2.50)	1.52 (2.18)	2.77+ (1.62)	-1.24 (1.47)	4.14 (3.89)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	7.72 (6.41)	12.21 (9.59)	19.93 (12.44)	7.68 (5.42)	13.23* (5.29)	20.91* (8.33)	40.84* (16.63)	-1.28 (1.69)	-0.21 (2.09)	1.48 (1.83)	0.12 (1.35)	1.34 (1.23)	-0.64 (3.32)
Age of oldest child													
	-1.01 (0.96)	0.94 (1.44)	-0.07 (1.87)	0.04 (0.82)	0.04 (0.80)	0.08 (1.25)	0.01 (2.50)	-0.45+ (0.26)	-0.12 (0.32)	0.56* (0.28)	0.30 (0.21)	0.26 (0.19)	0.85+ (0.50)
Age difference (elder-younger)													
	1.27 (1.45)	2.95 (2.16)	4.22 (2.81)	0.90 (1.22)	-1.40 (1.19)	-0.50 (1.88)	3.72 (3.75)	-0.13 (0.38)	0.47 (0.47)	-0.34 (0.41)	-0.05 (0.31)	-0.28 (0.28)	-0.63 (0.77)
Total housework time, household ^c													
								-0.00 (0.30)	-1.19** (0.37)	1.20*** (0.32)	0.59* (0.24)	0.60** (0.22)	
Total housework time, children ^c													0.80 (1.22)
Constant	68.79*** (11.34)	191.66*** (16.97)	260.45*** (22.03)	27.57** (9.59)	41.44*** (9.36)	69.01*** (14.74)	329.46*** (29.43)	23.40*** (3.17)	64.07*** (3.92)	12.53*** (3.43)	4.17 (2.54)	8.46*** (2.31)	42.67*** (6.05)
N	1005	1005	1005	1005	1005	1005	1005	1001	1001	1001	1001	1001	831
R²	0.030	0.037	0.020	0.076	0.063	0.067	0.033	0.042	0.054	0.067	0.073	0.052	0.095

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.

Table S14. OLS-regression of time use for repairs, car and administration (= non-routine housework) and shares between all household members on weekends

	Time							Share of total household time ^a					Children's sharing ^b
	Father	Mother	Parents	Elder child	Yngr child	Children	Household	Father	Mother	Children	Elder child	Yngr child	Elder child
Children's sex composition													
Two boys	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Elder boy & younger girl	0.16 (4.04)	0.80 (1.00)	0.96 (4.36)	-0.49 (2.04)	1.54 (2.06)	1.05 (3.12)	2.01 (5.86)	-4.04 (6.59)	-0.38 (4.63)	4.46 (5.52)	4.80 (4.56)	-0.35 (3.44)	2.60 (12.88)
Elder girl & younger boy	4.05 (4.06)	1.70+ (1.01)	5.74 (4.37)	-2.82 (2.05)	3.12 (2.07)	0.29 (3.13)	6.04 (5.88)	-6.28 (6.72)	3.34 (4.72)	2.97 (5.64)	-1.28 (4.66)	4.24 (3.52)	-17.73 (12.47)
Two girls	3.34 (4.12)	0.80 (1.02)	4.14 (4.44)	-4.38* (2.08)	-1.31 (2.10)	-5.70+ (3.18)	-1.55 (5.97)	-0.36 (7.07)	6.36 (4.97)	-5.97 (5.93)	-0.78 (4.90)	-5.22 (3.70)	4.88 (16.03)
Parents' working patterns													
Both full-time	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Male full, female part time	1.76 (4.36)	1.37 (1.08)	3.12 (4.69)	1.44 (2.20)	-1.52 (2.22)	-0.08 (3.36)	3.04 (6.32)	-7.29 (7.06)	4.44 (4.96)	2.82 (5.92)	7.89 (4.89)	-5.11 (3.69)	18.81 (15.56)
Male breadwinner	-1.20 (5.00)	0.52 (1.24)	-0.68 (5.39)	1.35 (2.53)	-0.77 (2.55)	0.58 (3.86)	-0.10 (7.25)	-7.21 (7.73)	-1.95 (5.43)	9.17 (6.48)	8.33 (5.36)	0.80 (4.04)	9.43 (14.91)
Male not full-time	-6.08 (5.98)	-0.55 (1.48)	-6.63 (6.44)	-1.40 (3.02)	-2.12 (3.05)	-3.52 (4.61)	-10.15 (8.67)	2.29 (10.41)	-7.95 (7.31)	5.63 (8.72)	9.85 (7.21)	-4.25 (5.44)	29.90 (22.57)
Number of children working													
0	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
1	2.73 (4.00)	0.08 (0.99)	2.81 (4.31)	4.94* (2.02)	-1.09 (2.04)	3.85 (3.09)	6.66 (5.80)	-3.73 (6.20)	-3.93 (4.35)	7.65 (5.19)	8.39+ (4.29)	-0.74 (3.24)	13.82 (11.36)
2	-3.88 (5.69)	1.00 (1.41)	-2.88 (6.13)	1.66 (2.88)	6.91* (2.90)	8.56+ (4.39)	5.69 (8.25)	-12.34 (8.82)	-2.45 (6.19)	14.79* (7.39)	3.29 (6.11)	11.46* (4.61)	-20.08 (14.12)
University degree in household													
No	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
Yes	-0.76 (3.00)	0.13 (0.74)	-0.63 (3.23)	-3.08* (1.52)	-0.66 (1.53)	-3.74 (2.31)	-4.37 (4.35)	4.18 (5.07)	-1.04 (3.56)	-3.13 (4.25)	-5.81+ (3.51)	2.67 (2.65)	-5.76 (11.08)
Survey year													
1991/1992	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
2001/2002	-0.73 (4.48)	-0.23 (1.11)	-0.96 (4.83)	-3.40 (2.27)	-5.33* (2.29)	-8.74* (3.46)	-9.69 (6.50)	12.59+ (6.43)	-6.91 (4.51)	-5.69 (5.39)	-0.69 (4.45)	-4.91 (3.36)	-5.93 (12.17)
2012/2013	-8.82+ (4.72)	-0.35 (1.17)	-9.17+ (5.08)	-1.03 (2.38)	-4.52+ (2.41)	-5.55 (3.64)	-14.71* (6.84)	6.40 (6.99)	0.46 (4.91)	-6.90 (5.86)	-3.85 (4.84)	-2.97 (3.65)	-7.69 (13.97)
Region													
West Germany	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.	ref.
East Germany	-0.03 (3.95)	1.79+ (0.98)	1.75 (4.26)	1.57 (2.00)	0.98 (2.02)	2.55 (3.05)	4.31 (5.73)	-7.73 (6.26)	4.49 (4.40)	3.26 (5.25)	4.30 (4.34)	-1.02 (3.28)	17.33 (13.46)
Age of oldest child													
	0.23 (0.59)	0.08 (0.15)	0.31 (0.64)	0.34 (0.30)	0.21 (0.30)	0.55 (0.46)	0.86 (0.86)	-1.06 (0.96)	-0.28 (0.68)	1.34+ (0.81)	0.81 (0.67)	0.54 (0.50)	1.45 (1.63)
Age difference (elder-younger)													
	0.39 (0.89)	0.03 (0.22)	0.43 (0.96)	0.48 (0.45)	-0.11 (0.46)	0.37 (0.69)	0.80 (1.29)	0.63 (1.37)	0.52 (0.96)	-1.15 (1.15)	0.14 (0.95)	-1.30+ (0.72)	2.51 (2.44)
Total housework time, household ^c													
								1.16 (1.05)	-0.94 (0.73)	-0.22 (0.88)	-0.55 (0.72)	0.34 (0.55)	
Total housework time, children ^c													
													2.10 (3.68)
Constant													
	15.07* (7.00)	-0.40 (1.73)	14.67+ (7.54)	2.07 (3.54)	6.01+ (3.57)	8.08 (5.40)	22.74* (10.14)	69.71*** (11.70)	19.02* (8.21)	11.26 (9.80)	0.39 (8.10)	10.84+ (6.12)	21.83 (22.31)
N	1005	1005	1005	1005	1005	1005	1005	314	314	314	314	314	101
R ²	0.014	0.010	0.015	0.035	0.028	0.037	0.023	0.055	0.050	0.093	0.079	0.114	0.204

Notes: ^a Intercepts sum up to 100%, rounding differences may apply; ^b Elder child's share of total children's time, only if both children's time is greater than zero; ^c divided by 100. Regression coefficients, standard errors in parentheses. German Time Use Study, pooled data for 1991/1992, 2001/2002, 2012/2013, own calculations.