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To cite this article: Kamila Kolpashnikova & Man-Yee Kan (2021): Gender gap in housework time: how much do individual resources actually matter?, The Social Science Journal, DOI: [10.1080/03623319.2021.1997079](https://doi.org/10.1080/03623319.2021.1997079)

To link to this article: <https://doi.org/10.1080/03623319.2021.1997079>



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Published online: 16 Dec 2021.



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Gender gap in housework time: how much do individual resources actually matter?

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ABSTRACT

Using data from the 2003–2019 American Time Use Survey Extract (ATUS-X), we analyze the gender gap among heterosexual married Americans of working age in four categories of housework: cleaning, cooking, grocery shopping, and home maintenance. The results show that in the division of housework, the explanatory power of resource factors increased over time. Still, less than a half of the gender gap in housework time could be explained by the gender differences in resources. Thus, despite the recent developments in housework research, a considerable part of the gender gap in housework remains unexplained. The explanatory power of resource-based models increased unevenly over the analyzed years. It strengthened in more traditionally ‘feminine’ tasks, such as cooking and cleaning, but not in grocery shopping or home maintenance. The results highlight the limits of the resource-based (and generally individual-level) theories and the pervasiveness of gender inequality in housework.

ARTICLE HISTORY

Received 27 April 2020

Revised 18 October 2021

Accepted 20 October 2021

KEYWORDS

Decomposition; gender gap in housework; non-routine housework; resource-based framework; routine housework; time availability

Introduction

Time-use research reports a general trend towards gender convergence in domestic work (Altintas & Sullivan, 2017; Guppy & Luongo, 2015; Sullivan et al., 2018). However, task segregation persists—men and women do different housework types often differentiated both by gender-type (feminine, masculine, gender-neutral or shared) and time commitment (routine and non-routine) (Perry-Jenkins & Gerstel, 2020). For example, cooking and cleaning are still considered primarily women’s work, whereas grocery shopping, managing household finances, home repairs, and gardening are shared more equally between men and women (Altintas & Sullivan, 2017; Doan & Quadlin, 2019; Guppy et al., 2019; Kolpashnikova, 2018; Lachance-Grzela & Bouchard, 2010). The gender gap in traditionally feminine types of housework, which coincide with routine tasks, is closing relatively slowly (Altintas & Sullivan, 2017; Guppy & Luongo, 2015; Lachance-Grzela & Bouchard, 2010).

Our paper contributes to the theoretical discussions on the strength and applicability of resource-based theories (England, 2011; Sullivan, 2011). We use the term ‘resource-based theories/frameworks’ as an umbrella term encompassing three main economic resource frameworks—time availability (Blood & Wolfe, 1960; Coverman, 1985; Foster & Stratton, 2018; Hook, 2004), relative resources (Blood & Wolfe, 1960; Brines, 1994), and absolute resources (Gupta, 2007; Killewald & Gough, 2010).

Sullivan (2011) and England (2011) argued that the relevance of individual resources increased over time and housework scholarship needs to pay more conceptual and theoretical attention to resource-based theories. However, previous studies on gender convergence in domestic work time tended to focus on men’s or women’s own housework time rather than the differences between gender groups (e.g., Altintas & Sullivan, 2017; Bianchi et al., 2000; Craig, 2007; Hook, 2006; Sayer, 2005). Many

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studies focused on the association between housework time and individual socio-economic characteristics such as income and employment status rather than on how the applicability of theories itself might change over time (e.g., Bittman et al., 2003; Craig, 2007; Treas & Tai, 2016; for an exception see Bianchi et al., 2000). Furthermore, relatively few studies tested the resource-based theories on different types of housework (for exceptions see Kolpashnikova & Kan, 2020a, b). This paper examines the above contentions empirically on the gender gap in housework time among heterosexual married women and men. Testing theory in its ability to explain the gender gap can provide insights into whether the gender convergence in housework can be accomplished over time if market-based incentives abound. We try to address the paucity of comprehensive studies that systematically address how much resource-based factors can actually contribute to overcoming the gender gap in housework time (Kim & Chin, 2016; Pepin et al., 2018).

Additionally, this paper provides benchmarking tools for comparing the explanatory power of theories when no such benchmarks exist. Constructing and comparing models across different years helps fashion such criteria. Moreover, the analyses of different housework tasks can also serve as benchmarks, especially considering that analyzing by separate tasks is necessary as recent findings show (Pepin et al., 2018). The importance of separate task analyses is justified because different types of tasks carry different gendered meanings. These meanings can affect the applicability of resource-based explanations and theories. Gender ideologies and attitudes can shape the division of housework in the way that corresponds to the traditional gender expectations rather than being responsive to the availability of economic resources (Davis & Greenstein, 2009; Zhou, 2017).

We investigate the extent to which the resource-based approaches can account for the gap in the division of domestic labor in the US using the Kitagawa-Blinder-Oaxaca decomposition method across different housework tasks and years. The study addresses two principal research questions (1) whether the conventional resource-based factors can account for the gender gap in routine and non-routine housework, and (2) whether the applicability of the resource-based frameworks increased over time, as Sullivan (2011) and England (2011) argue.

Theoretical framework

Types of housework

Research on the domestic division of labor classifies housework tasks based on their routine nature and gendered meanings. Some housework tasks are more demanding on the individual time and scheduling than others (Craig & Powell, 2018; Guppy & Luongo, 2015; Lachance-Grzela & Bouchard, 2010). Therefore, the literature often referred to them as ‘routine’ tasks. Routine tasks are more time-consuming and often require daily commitment. The routine housework category includes tasks like cooking, cleaning, and doing laundry. The routineness of a task is often measured by how much time a task requires to complete and how frequently it needs to be performed. The time constraint imposed by a task serves as a litmus test for classifying a task as routine in most research (Batalova & Cohen, 2002; Coltrane, 2000; Lee & Waite, 2005). Conversely, non-routine tasks can be performed when needed or when there is enough free time. This type refers to tasks like managing household finances, gardening, outdoor cleaning, and home repairs.

There is an additional classification of housework tasks that focuses on their association with gendered meanings. Concerned with the segregation of work into women and men’s work, scholars of the division of housework in the 80s and 90s identified two main analytical types of housework: those culturally constructed as feminine and those constructed as masculine (Berk, 1985; Gager et al., 1999; Perry-Jenkins & Gerstel, 2020; Shelton, 1992). This classification exposes that the traditional expectations around gender performances resisted change through the increased task segregation and the socially constructed gendered meanings of housework tasks. By engaging in the segregated domains of activities, spouses preserved the appearance of gender equality and the equal division of housework (Hochschild & Machung, 1989). For

example, some tasks such as cooking and cleaning, which were traditionally considered feminine, required a higher investment of time (Twiggs et al., 1999), but others like home maintenance and repairs were viewed as typically masculine and were not as time-consuming as cooking or cleaning (Coltrane, 2000; Lachance-Grzela & Bouchard, 2010). As a result, the equal division of housework often meant the ‘equal’ distribution of these domains—for instance, women were expected to cook, whereas men do maintenance tasks.

Although grocery shopping and home management are still done mostly by women, they dominate men’s domestic work time (Altintas & Sullivan, 2017). Therefore, the traditional association of grocery shopping with women’s tasks has weakened, transforming grocery shopping into the most shared, or ‘gender-neutral,’ type of housework (Baxter, 2002; Craig et al., 2015). Overall, although the associations with the feminine and masculine performances of certain tasks have changed over time, most housework tasks are still associated with women rather than men (Blair-Loy et al., 2015; Daminger, 2019). Blair-Loy et al. (2015) demonstrate that gendered meanings permeate all levels of analysis and processes in the division of labor between women and men. Daminger (2019) shows that the gendered associations happen at a cognitive dimension—a lot of planning of housework and related tasks falls on women’s shoulders rather than men’s—deepening the gendered divide at the household level.

Previous research established two principal axes along which housework tasks could be categorized: (1) time commitment, or the routine character of a task or how much time is needed for the task to be performed (routine and non-routine tasks), and (2) gender association, or the gendered character of a task or how much the task is associated with women rather than men (feminine, masculine, gender-neutral or shared). Routine tasks often coincide with feminine tasks, and non-routine—with masculine tasks. In their review of the housework literature, Perry-Jenkins and Gerstel (2020) summarize that more housework is done by women than employed men, especially in ‘feminine’ tasks. Cooking, cleaning, and shopping are more likely to be associated with women than men compared to maintenance as well as outdoor cleaning and repairs (Doan & Quadlin, 2019). Out of the three routine housework task categories, grocery shopping is less routine and more ‘gender-neutral’ in the context of European and Anglophone countries. Thus, based on the two axes, we have at least three clusters of housework tasks: (1) traditionally more associated with women and time-consuming—cooking and cleaning, (2) traditionally ‘gender-neutral’ but routine—grocery shopping and home management, and (3) traditionally more associated with men and time-flexible—maintenance and repairs.

Theoretical approaches

There are three main resource-based approaches to explain the gendered division of cleaning, cooking, grocery shopping, and home maintenance. First, according to the time availability approach, or the time constraint approach (Blood & Wolfe, 1960; Coverman, 1985; Foster & Stratton, 2018; Hook, 2004), a partner with more time outside of paid work takes on more housework responsibilities because the other partner has less time available for housework.

With increased employment rates among women and the stagnation in the housework gap, it would be reasonable to expect for the explanatory power of the time constraint framework to weaken. However, even the most recent research reasserts that time availability is a strong predictor of housework time. For example, Bünning (2020) demonstrates how time availability can predict fathers’ time across different employment transitions showing that part-time employed fathers spend more time on housework and childcare than full-time employed fathers. However, when fathers return to full-time employment, their housework time decreases again. As Foster and Stratton (2018) show in their analysis of the Australian data, the trade-off between paid work time and housework time is not symmetrical: the reduction in men’s paid work hours will only be accompanied by a relatively smaller increase in their housework hours.

According to the time availability approach, on average, women work shorter hours than men, and therefore, they do more routine housework such as cooking and cleaning than men (Craig & Powell, 2018; Guppy & Luongo, 2015; Lachance-Grzela & Bouchard, 2010). Unlike routine housework, non-routine housework can be flexibly arranged to be performed on weekends or holidays. Thus, the time availability approach should account for the participation in routine housework tasks better than in non-routine tasks.

Another resource-based framework is the relative resources argument (Blood & Wolfe, 1960; Brines, 1994; Greenstein, 2000). It posits that a spouse with more resources has more power to bargain and avoid housework. Employment status is a major means to obtain economic and sociocultural resources. These resources can also be non-monetary, such as occupational and educational prestige or social standing. The spouse who has a larger share of resources usually spends considerable time in the labor market to earn money, and hence is less likely to have time for housework. The relative resources perspective is also predicated on the idea of gender conflict, where household members are expected to have conflicting interests and avoid housework as a mundane activity.

The third resource-based framework is the absolute resources, or the autonomy, perspective. Gupta (2007) and Killewald and Gough (2010) argued that households relied on autonomous decision-making rather than bargaining. Under the absolute resources perspective, partners' economic resources are expected to increase the purchasing power and, therefore, the outsourcing ability of spouses. Thus, women with higher earnings are expected to forgo housework more readily than women with lower earnings.

The gendered character of housework tasks also interacts with resource factors in the gendered division of housework. According to the gender-centered perspective, the cultural and symbolic meanings of housework tasks are at the core of the resulting differences in how much resources can account for the gender gap (Artis & Pavalko, 2003; Brines, 1994; Evertsson & Neramo, 2004; Greenstein, 2000; Hook, 2010; West & Zimmerman, 1987). Housework tasks are traditionally divided into the segregated domains of women's and men's work. To *achieve* their respective genders (West & Zimmerman, 1987), women and men are involved daily in the tasks congruent with their gender identities but perform less of those that are discrepant (Davis & Greenstein, 2009). The proponents of this perspective emphasize that gendered expectations and social norms attached to domestic tasks play a key role in the division of housework (Davis & Greenstein, 2020; Lachance-Grzela & Bouchard, 2010).

Decomposing the gender gap: equality vs equity

To analyze the gender gap, there are a couple of questions that need to be answered. The first question concerns the definition of a fair division of housework. In decomposition models, the outcome variable is compared against an expected non-discriminatory predicted value. The non-discriminatory value can be calculated based on what is being prioritized: equality or equity (Blair & Johnson, 1992; Thompson, 1991). If the priority is on equality, then the share of women's housework time needs to be equal to that of men, suggesting the 50–50 division. Conversely, when the purpose is gender equity in housework time, partners' resource contributions are taken into account to define a fair and equitable amount of housework time partners are expected to do.

Compared to the non-discriminatory values, the decomposition models then separate the gender gap in housework into two main parts: explained and unexplained by the analytical decomposition model. Then, another question concerns the meanings and implications of these (explained and unexplained) parts for equity and equality in the division of housework. Figure 1 summarizes our argument on the issue.

On the one hand, when the division of resources corresponds to the division of housework time, then the explained part of the decomposition models should be larger. These cases cover two main quadrants in Figure 1: 1) the cases when inequitable resources correspond with inequitable housework (the top-left quadrant in Figures 1), and 2) the cases when equitable resources correspond with equitable housework (the bottom-right quadrant in Figure 1).

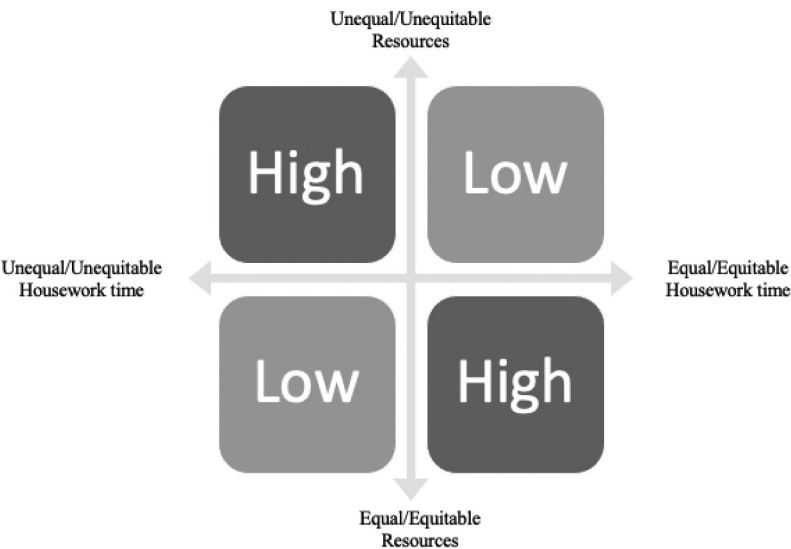


Figure 1. Theoretical expectations on the explained and unexplained parts of decomposition models.

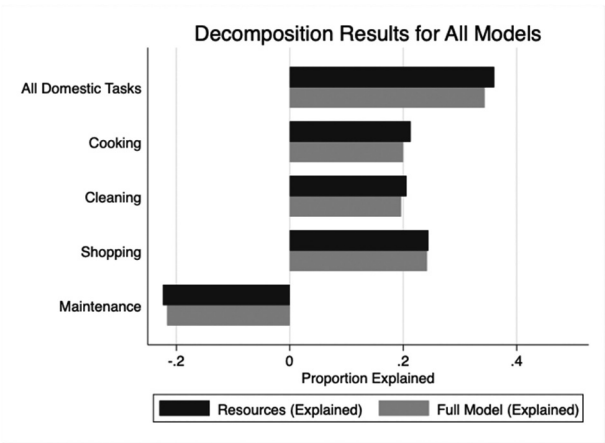


Figure 2. Decomposition model summaries (explained proportions).

On the other hand, when there is a mismatch between the levels of inequity/inequality in resources with the levels of inequity/inequality in housework time, the decomposition models based on resources would not explain the division of housework. Thus, the explained part would be lower in cases when inequitable resources correspond to equitable housework time or when equitable resources correspond to inequitable housework time (the top-right and bottom-left quadrants in Figure 1).

In situations when the labor market equality is achieved (for instance, equal paid hours and equal wage), but the equity at home remains elusive—women still do more housework than men, the explained part would be lower (the bottom-left quadrant) than in the cases when there is a direct correspondence between resources and housework time (the top-left or bottom-right quadrants). This situation can be envisioned when the legal strides in the labor market fail to eradicate the cultural norms around housework performance.

In situations when there is still considerable gender inequality in the labor market, but the division of housework already shifts toward more equitable, the explained part would be lower than in the cases of direct correspondence (top-right quadrant in Figure 1). This situation indicates that the cultural shift might have preceded the progressive strides in the labor market when the discrimination of women in paid work hours and wage still continues, but equality at home is within reach. These situations can occur when cultural changes toward equality and equity precede legal changes in the labor market.

The present study

Another issue that needs to be resolved with regard to decomposing the gender gap in housework is benchmarking. Because no theoretical and empirical work has benchmarked on exactly how much of the gender gap the resources can or should be able to explain, it remains impossible to earmark what the equitable/equal share of housework is that resource framework must be able to explain. Moreover, the benchmarks would vary depending on the data and models. For this reason, we analyze the models compared to each other, contrasting model results by different domestic tasks and across different years.

Relying on decades of research, we know that there is gender inequality in resources. Thus, we cannot assume that the division of resources is equitable as in the bottom quadrants of Figure 1. Most theoretical frameworks are based on the premise that inequalities/inequities in resources directly translate into the inequalities/inequities in housework time (as in the top-left quadrant in Figure 1). In such a case, most housework time should be explained by the resource inequalities/inequities in the labor market.

Yet, this logic would apply if the housework tasks were performed regularly. In the case of non-routine housework, the argument would not be justifiable because of the necessity-based character of most non-routine tasks. Thus, we expect that:

Hypothesis 1 (Resource Availability Hypothesis): The resource availability explains the gender gap in the time-consuming and routine housework such as cooking, grocery shopping, and cleaning better than in the non-routine housework such as home repairs.

Additionally, recent housework research brought evidence of the gender convergence in housework time over years, although it was slower than expected (Altintas & Sullivan, 2017; Sullivan et al., 2018). Many European and Anglophone societies are slowly moving towards greater gender equality both in the labor market and at home. In many of these societies, women challenge the traditional expectations of the gendered division of housework and decrease their relative share of domestic work (Gershuny, 2000; Heisig, 2011; Hook, 2006, 2010; Sullivan et al., 2018). The changes might have affected the division of labor, aligning it with the principle of equity and equality, and increasing the explanatory power of resources (England, 2011; Sullivan, 2011). Therefore, we expect to observe an increase in the relevance of the resource-based factors compared to the gender-centered approach over the recent years:

Hypothesis 2 (Gender Gap Convergence Hypothesis): The explanatory power of the resource-based factors in the gender gap increased over the analyzed years in the tasks that are traditionally associated with women.

Methods

Data and sample

We use data from the 2003–2019 American Time Use Survey Extract (ATUS-X) (Hofferth et al., 2020). The time-use data collect 24-hour activity diaries and are more accurate in measuring daily activities such as housework than stylized surveys because diaries are less susceptible to the social desirability

bias (Hofferth & Casper, 2007). The sample includes non-institutional residents of the US who were at least 15 years of age at the survey collection time. The personal weights used in this study scale the ATUS survey weights to the original sample size.

We started with 210,586 observations from ATUS-X between 2003 and 2019. We restricted the main sample to heterosexual married women and men. This left us with 102,995 observations (we excluded those who reported that their spouses were absent). Then, we removed 247 individuals from the sample who reported that they lived in households with only one member (themselves) present because the bargaining with resources and time does not apply to one-person households.

The economic resources are mostly produced through participation in the labor market, and the division of housework in the underage and elderly populations might be driven by factors other than economic ones. Thus, we limited the sample to the working-age population between 20 and 65 years of age ($n=85,993$). Finally, we kept only the observations for which all model variables (reported in Table 1) were available and imputed the variables with the most missing ($>3\%$) values. We used the Markov chain Monte Carlo data augmentation to create 10 imputed samples and used averaged values across the samples for the imputed missing values (final sample $n=85,554$). The final total sample of imputed data includes 39,785 men's person-days and 45,769 women's person-days (see Table 1). The overall results for the sample without imputation were similar to those reported here. Eighty-three percent of the sample reported being native-born. About 71% of the sample reported to be White, 7% Black, 5% Asian, 14% Latinx, and less than 2% of other races/ethnicities. Although most race groups are close to the composition of the US population, married Black women and men were under-represented in our sample compared to the overall American population.

Dependent and independent variables

Our models' main dependent variables include an aggregate measure of the time spent on all four domestic tasks combined and individual tasks: cooking, cleaning, grocery shopping, and home maintenance. The details on what activities are included in the housework tasks are in the Appendix. Table 1 summarizes the average statistics for the main domestic tasks, as well as for independent and control variables. There are considerable differences between women and men in time spent in all housework tasks. Among routine tasks, the gender gap is the largest in cleaning—48 minutes on an average day (see Table 1). Because factors that shape the division of housework do not always coincide with those defining childcare, we decided to limit our study only to housework (Sullivan & Gershuny, 2013).

We included the usual hours spent on paid work, a common factor testing the time availability argument. This measurement of the time constraint is consistent with the previous research, which employs the variables measuring usual work hours in a week to operationalize the time constraint (e.g., Craig & Baxter, 2016; Treas & Tai, 2016). In between 2003 and 2019, an average American husband worked 40 hours a week, whereas an average American wife—25 hours a week. Thus, men spent about 14 hours more in paid work in a week, on average, than women. Although including the paid work time in the models may introduce endogeneity problems, considering the labor market structure in the US, we believe that the paid work time is predetermined relative to the dependent variable, housework time. Thus, following the conventions in sociological housework theories, we include the variable into our models. We also included employment status dummy variables for respondents and their spouses.

The relative resources approach is tested using the share of her earnings in the couple's total earnings. This variable is calculated using the weekly earning of the respondent if the respondent is female and of the spouse if the spouse is female. Descriptive statistics in Table 1 show that around 40% of the household earnings among heterosexual married couples are her earnings.

The autonomy, or the outsourcing, approach can be tested by hourly wage measured in dollars per hour. An average American husband earns 7 dollars an hour and an average wife—5.6. Therefore, the data show that an average American married man earns more for each hour of work than an average married American woman. We also report the average household income in Table 1. Wives'

Table 1. Mean (SD) and % of main variables.

	Women	Men	Gap
Dependent Variables: Housework Tasks			
Housework time (min.)	147.072 (142.200)	79.322 (120.738)	67.75
(% Participation)	89.85	68.33	21.52
Cooking time (min.)	58.673 (65.558)	20.370 (39.239)	38.30
(% Participation)	77.03	42.95	34.08
Cleaning time (min.)	62.474 (95.418)	14.665 (47.524)	47.81
(% Participation)	57.00	19.27	37.73
Shopping time (min.)	11.133 (24.420)	6.197 (18.318)	4.94
(% Participation)	32.05	24.01	8.04
Maintenance time (min.)	14.792 (56.032)	38.090 (98.442)	–23.30
(% Participation)	13.78	24.87	–11.09
Independent and Control Variables			
Education in years	14.078 (3.102)	13.980 (3.320)	0.10
SP: Education in years	14.160 (3.101)	14.220 (2.958)	–0.06
Usual Weekly Hours	25.433 (19.981)	39.746 (18.609)	–14.31
SP: Usual Weekly Hours	36.448 (19.824)	24.863 (20.191)	11.59
Usual Hourly Wage	5.641 (9.904)	7.152 (11.599)	–1.51
Her Earnings Share	0.410 (0.130)	0.391 (0.129)	0.02
Employed (%)	68.29	87.13	–18.84
SP: Employed (%)	82.95	67.06	15.89
Age	44.145 (11.314)	45.281 (10.957)	–1.14
Birth year	1966.818 (12.079)	1965.658 (11.783)	1.16
Household size	3.404 (1.378)	3.474 (1.402)	–0.07
Household Income	77,316.816 (42,411.676)	78,112.362 (42,376.597)	–795.55
Presence of Children			
No children under 18	46.83	44.52	2.31
Children Under 5	22.46	23.36	–0.9
Children Above 5	30.71	32.13	–1.42
Born in the USA	81.71	81.54	0.17
Owns home	81.90	81.77	0.13
Weekday	71.41	71.57	–0.16
Ethnic/Racial Group Belonging			
White only	71.97	70.97	1
Black only	6.79	7.79	–1
Asian only	5.25	4.27	0.98
Latinx	14.57	15.32	–0.75
Other	1.43	1.65	–0.22
N	45769	39,785	

and husbands' household incomes are—around 78,000 dollars per annum. In the models, we logged the measure for household income. We also added a dummy variable for homeownership (1= 'family owns the home', 0= 'otherwise').

Because the presence of children introduces additional time constraints (Wight et al., 2013), we added another control variable for whether respondents had children (under 5, between 5 and 18 years of age). The presence of other adult household members can also help with housework duties. Therefore, we control for the household size in our models.

Unfortunately, there are no direct measures of gender attitudes and ideology in the ATUS-X data. Previous research in more traditional countries than the US (Kolpashnikova & Kan, 2020a) shows that the conventional tools to measure gender attitudes are unable to capture the systems of gender oppression characteristic of most societies. To take into consideration that traditional gender attitudes change with time (Baxter & Kane, 1995), we included birth years (as a proxy to control for cohorts) and education in years (which also can work as a proxy for social norms). Birth year is measured as a continuous variable of the year of birth (including birth year without polynomials assumes a linear change over cohorts). Education variable also captures the gradient in socioeconomic status, which also influences how women and men engage in unpaid labor (Altintas & Sullivan, 2016; Gupta et al., 2021; Kolpashnikova & Koike, 2021). The models also control for self-identification with the following main racialized and ethnic groups: non-Latinx White, non-Latinx Black, non-Latinx Asian, and Latinx Americans. Although race was also asked among Latinx respondents, we kept Latinx as a separate category. We also included a dummy variable of whether the respondent was born in the US.

Our models include variables measuring spousal characteristics, such as spouses' education, employment status, and usual weekly hours of paid work. These variables are measured in the same way as the corresponding variables for the main respondents.

The daily activities tend to vary considerably from day to day, especially between weekdays and weekends (Kolpashnikova & Kan, 2020a, 2020b, 2020c). To mitigate the differences between days of the week, we also control for whether the diary day was completed on a weekday or weekend.

Analytical strategy

We use decomposition models for testing the effects of economic resources and common demographic variables on housework time. In the first step, we run OLS regressions separately for women and men and report the results. OLS regressions are preferable to Tobit models in the analysis of time-use diaries (Stewart, 2013). Then, we run decomposition models. In the decomposition models, we include all measures of economic resources and other control variables included in the OLS models. Separate models are presented for the aggregate measure of housework and each housework task separately.

We employ the pooled Kitagawa-Blinder-Oaxaca decomposition method to break down the effects of each factor on the gender gap in housework time (Blinder, 1973; Jann, 2008; Kitagawa, 1955; Oaxaca, 1973). The pooled variant of the method separates the effects into the explained and unexplained parts. The explained part shows the share of the gender gap that can be accounted for by model factors, whereas the unexplained portion—the share of the gender gap that cannot. The study compares the explained part across models by housework tasks and years, benchmarking them against each other.

To analyze how much of the gender gap in domestic tasks can be explained by economic resources, the literature employs the Kitagawa-Blinder-Oaxaca decomposition method (Kolpashnikova & Kan, 2020a, 2020b, 2020c). In cases when equity is prioritized, the non-discriminatory predicted values also consider other individual and structural characteristics. There are two main variations of the Kitagawa-Blinder-Oaxaca decomposition method used for these purposes. For equality, the pooled decomposition employs relatively more straight-forward ways of pooling, such as assigning equal weights to the coefficients ($\beta^* = W\beta_A + (I-W)\beta_B$ where $W=0.5$) (Reimers, 1983). For equity, the method includes more factor-interrelated versions such as in Neumark (1988), Oaxaca and Ransom (1999), and the variant with the inclusion of group indicators explained in Jann (2008). We use the latter variant in this paper.

We run a few robustness checks, such as without controls and including paid work time on the diary day instead of average weekly hours and weekly wages instead of hourly wages. The results were similar to those reported in the present paper.

Findings and discussions

OLS models by gender

Tables 2 and 3 summarize the OLS estimates for housework models separated by gender and housework tasks. Figure 2 illustrates how much of the gender gap in housework time can be explained by resource factors and full models. Figures 3 and 4 show the explanatory share by housework task and year. Overall, the results for the total housework time show that the explanatory power of resource-based models increased over the analyzed period, as Sullivan (2011) and England (2011) suggested (see Figure 3). Particularly, the explained part increased in cooking and cleaning (see Figure 4), *i.e.*, in the main routine tasks. However, for grocery shopping and maintenance tasks, the explanatory share of the model has decreased slightly or remained flat respectively.

Testing the hypotheses

Separate estimates for all housework, cooking, cleaning, grocery shopping, and home maintenance tasks were used to decompose the gender gap. Figure 2 summarizes what share of the gender gap could be explained by the decomposition models for each type of domestic tasks and for the aggregate measure of housework time. The shares of housework gender gap shown in Figure 2 were calculated based on Table 4. The bars in the figure represent the proportion of the gender gap explained by combined resource factors and by the total model.

Table 2. Linear regression models of housework time, women.

	(1)	(2)	(3)	(4)	(5)
	Total Housework	Cooking	Cleaning	Shopping	Maintenance
Education	−2.040*** (0.374)	−0.624*** (0.177)	−1.751*** (0.264)	0.245*** (0.062)	0.090 (0.137)
SP: Education	−1.542*** (0.360)	−0.523** (0.181)	−0.741** (0.252)	0.005 (0.063)	−0.283* (0.133)
Usual Weekly Hours	−1.211*** (0.081)	−0.428*** (0.037)	−0.560*** (0.057)	−0.056*** (0.015)	−0.167*** (0.032)
SP: Usual Weekly Hours	0.285*** (0.074)	0.039 (0.035)	0.157** (0.052)	0.012 (0.014)	0.076** (0.027)
Usual Hourly Wage	0.038 (0.075)	−0.041 (0.033)	0.057 (0.049)	0.029* (0.014)	−0.006 (0.031)
Employed	−27.628*** (3.735)	−10.543*** (1.711)	−13.488*** (2.632)	−1.391* (0.666)	−2.206 (1.484)
SP: Employed	8.302* (4.050)	5.338** (1.893)	5.111 ⁺ (2.846)	0.973 (0.750)	−3.121* (1.496)
Her Earnings Share	−42.579*** (6.157)	−12.333*** (2.728)	−18.565*** (4.313)	−4.514*** (1.174)	−7.167** (2.372)
Birth Year	−1.126*** (0.098)	−0.538*** (0.043)	−0.386*** (0.071)	−0.018 (0.017)	−0.184*** (0.040)
Household Size	7.701*** (0.935)	4.806*** (0.431)	3.432*** (0.700)	0.216 (0.158)	−0.753* (0.300)
Household Income (log)	−4.048** (1.395)	−3.318*** (0.656)	−1.050 (1.019)	0.258 (0.231)	0.062 (0.465)
Presence of Children					
No child under 18	Ref.	Ref.	Ref.	Ref.	Ref.
Children Above 5	11.617*** (2.586)	7.518*** (1.177)	5.693** (1.873)	1.369** (0.456)	−2.963** (0.968)
Children Under 5	3.533 (3.081)	9.305*** (1.392)	−0.357 (2.251)	−0.642 (0.554)	−4.773*** (1.158)
Born in the USA	−31.024*** (2.902)	−23.393*** (1.455)	−9.800*** (2.075)	0.018 (0.521)	2.151* (0.836)
Home Ownership	5.343* (2.369)	−1.817 (1.108)	0.277 (1.714)	−0.091 (0.425)	6.973*** (0.695)
Weekday	−31.106*** (1.559)	−1.607* (0.708)	−16.024*** (1.094)	−3.956*** (0.288)	−9.519*** (0.658)
Ethnic/Racial Group					
White	Ref.	Ref.	Ref.	Ref.	Ref.
Black	−25.871*** (2.874)	−2.941* (1.484)	−12.902*** (2.000)	0.062 (0.539)	−10.090*** (0.783)
Asian	−2.087 (4.045)	17.622*** (2.244)	−15.483*** (2.791)	0.976 (0.834)	−5.202*** (1.151)
Hispanic	12.733*** (3.125)	7.606*** (1.457)	8.403*** (2.294)	2.041*** (0.568)	−5.317*** (0.929)
Other	−3.110 (6.053)	−1.686 (2.787)	0.722 (4.969)	1.314 (1.351)	−3.460 ⁺ (1.981)
Year dummies	YES	YES	YES	YES	YES
Constant	2515.166*** (192.937)	1181.391*** (84.945)	896.589*** (140.220)	44.774 (33.276)	392.412*** (79.025)
Observations	45,769	45,769	45,769	45,769	45,769
R ²	0.137	0.144	0.073	0.014	0.027
Adjusted R ²	0.136	0.143	0.072	0.013	0.027

Standard errors in parentheses. ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure 2 shows all model results relevant to the testing of the first hypothesis. The bars in Figure 2 represent the proportion to which the time gap would increase (if the number is negative) or decrease (if the number is positive) if women had the same level as men in economic resources, holding all other factors constant. The positive proportion for the total explained part (dark gray bars in Figure 2) are the shares of the gender gap that can be accounted for by full models.

As expected, the decomposition results show that the proportion of the explained part is larger for routine and traditionally feminine housework types than for non-routine and traditionally masculine tasks (particularly, home maintenance). So, the results in Figure 2 and Table 4 present some evidence in support of Hypothesis 1. Figure 2, thus, shows that the explained part is positive for cooking, cleaning, and shopping time decomposition but negative for maintenance tasks. The negative share indicates that the resource-based models cannot explain the division of labor in maintenance tasks.

Trends of association over Time

We also found limited support for Hypothesis 2, indicating change over time but a very slow and uneven one. Figures 3 and 4 present the share of the gender gap explained by the full models in total domestic work (Figure 3) and separately by tasks in cooking, cleaning, shopping, and maintenance (Figure 4). Each point on the graphs is based on a separate decomposition model, similar to those reported in Table 3 but for each individual survey year. Figure 3 shows that the explanatory power of the resource-based models increased over the analyzed period for the total measure of housework time. This finding suggests that the explanatory power of the resource-based factors increased slowly over time. Particularly, considering how much of the explained share is covered by the resource-based factors (see Figure 2), the findings attest that labor market changes directly affected the inequalities at home. This is in line with the argument in Sullivan (2011) and England (2011) that the explanatory power of the resource-based factors increase over time.

However, the results for the total housework time conceal the differences across individual housework tasks. Figure 4 indicates that the gender convergence might happen due to changes in factors other than the economic resources because the changes occurred mainly in the traditionally feminine

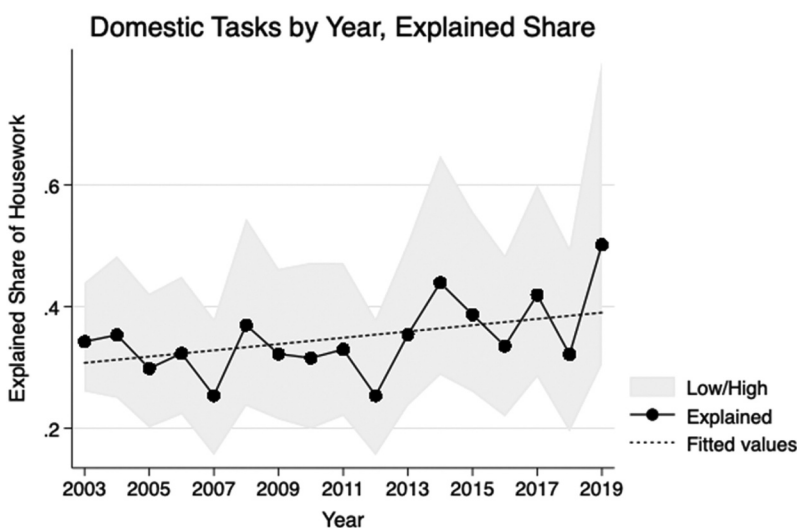


Figure 3. Share of total housework time explained over the period.

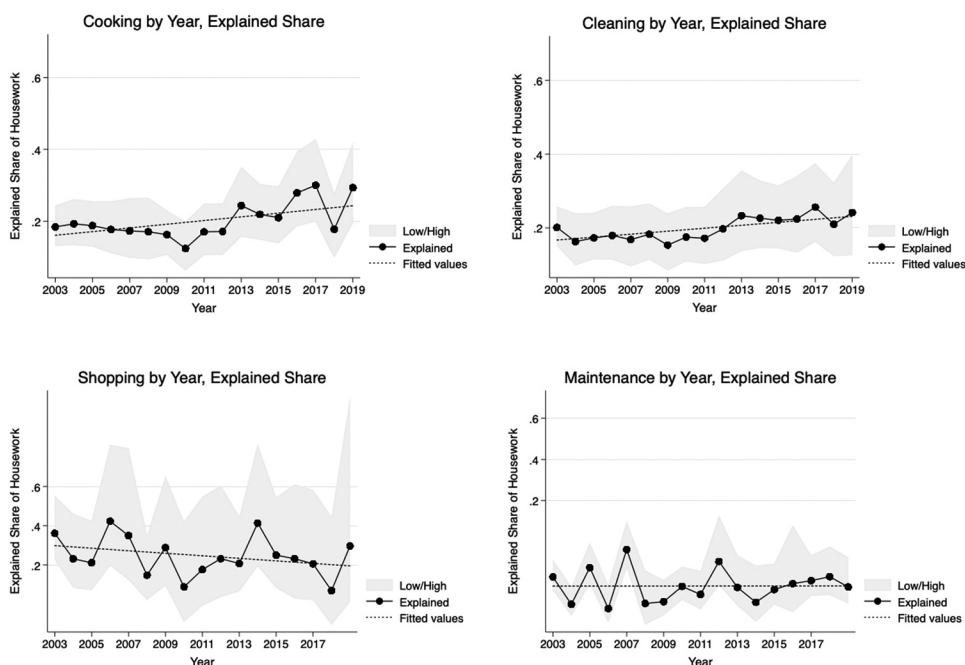


Figure 4. Share of housework time explained, 2003–2019: 1) Cooking time (Top-Left), 2) Cleaning time (Top-Right), 3) Shopping time (Bottom-Left), and 4) Maintenance time (Bottom-Right).

housework tasks, rather than ‘shared’ tasks such as grocery shopping or ‘masculine’ tasks such as maintenance and repairs. The hold of the gender-centered framework might have weakened in the period, albeit at a very slow pace.

The results also show that the explained part has slowly decreased in the more ‘gender-neutral’ task, shopping, and remained steady in maintenance. However, both women and men of younger generations spend significantly less time on maintenance tasks than older generations as the results of models in [Tables 2 and 3](#) reveal. Overall, the contradicting results for traditionally feminine and ‘gender-neutral’/masculine tasks call for more theoretical investigation of the housework and unpaid work mechanisms than the resource-based frameworks can provide.

We also note a few results regarding the control variables. The results for education in [Tables 2 and 3](#) confirm the contentions of the previous research ([Altintas & Sullivan, 2016](#); [Gupta et al., 2021](#)). More educated women spend considerably less time on cooking and cleaning, whereas more educated men—significantly more. More educated women and men spend significantly more time on grocery shopping than less educated women and men. Furthermore, the OLS models in [Tables 2 and 3](#) show that her earnings share in heterosexual married couples’ earnings has a significant impact on her housework time, but not his. Controlled for other variables, the results for the usual hours spent on paid work are consistent with the time availability framework—more time spent on paid work is associated with less time spent on housework.

Discussions and conclusions

This study contributes to the research of gendered division of labor by testing the applicability of the resource-based housework theories on different types of housework over time. Previous studies focused on the association between housework time and individual resources but overlooked how the explanatory power of these resource factors itself might have changed over time. We also filled an important gap in research by investigating the explanatory power of the resource-based housework

Table 3. Linear regression models of housework time, men.

	(1)	(2)	(3)	(4)	(5)
	Total Housework	Cooking	Cleaning	Shopping	Maintenance
Education	−0.710*(0.290)	0.310**(0.118)	0.219*(0.111)	0.139**(0.044)	−1.378*** (0.230)
SP: Education	−0.312(0.351)	0.464*** (0.127)	0.028(0.139)	−0.036(0.052)	−0.768** (0.286)
Usual Weekly Hours	−0.890*** (0.071)	−0.238*** (0.021)	−0.217*** (0.024)	−0.052*** (0.011)	−0.383*** (0.061)
SP: Usual Weekly Hours	0.354*** (0.086)	0.085*** (0.024)	0.103*** (0.030)	0.035*** (0.009)	0.132 ⁺ (0.077)
Usual Hourly Wage	0.234*** (0.063)	0.014(0.020)	0.017(0.022)	0.029** (0.009)	0.174** (0.054)
Employed	−16.833*** (4.353)	−4.641*** (1.400)	−8.191*** (1.805)	−0.609(0.675)	−3.392(3.605)
SP: Employed	2.428(3.304)	3.349*** (0.980)	1.774(1.190)	−0.997** (0.383)	−1.698(2.913)
Her Earnings Share	−5.677(7.193)	1.735(2.038)	2.803(2.502)	−0.041(0.802)	−10.173(6.471)
Birth Year	−0.430*** (0.096)	−0.025(0.030)	0.135*** (0.037)	−0.020(0.013)	−0.519*** (0.084)
Household Size	2.797** (1.036)	1.896*** (0.559)	0.723* (0.319)	−0.017(0.128)	0.195(0.779)
Household Income (log)	1.813(1.237)	−0.367(0.611)	0.986* (0.437)	−0.046(0.190)	1.238(0.973)
Presence of Children					
No child under 18	Ref.	Ref.	Ref.	Ref.	Ref.
Children Above 5	−0.255(2.815)	1.869(1.215)	1.592 ⁺ (0.892)	−0.104(0.355)	−3.612(2.347)
Children Under 5	0.597(3.276)	2.543* (1.271)	2.238* (1.091)	0.536(0.429)	−4.721 ⁺ (2.827)
Born in the USA	8.819*** (2.330)	1.234(0.922)	1.885 ⁺ (1.009)	−0.753 ⁺ (0.410)	6.454*** (1.769)
Home Ownership	15.796*** (2.249)	−0.551(0.807)	−2.166* (0.923)	−0.849* (0.349)	19.362*** (1.853)
Weekday	−55.301*** (1.512)	−6.514*** (0.493)	−12.271*** (0.597)	−5.392*** (0.248)	−31.124*** (1.279)
Ethnic/Racial Group					
White	Ref.	Ref.	Ref.	Ref.	Ref.
Black	−19.006*** (2.598)	−2.994** (0.982)	0.817(1.181)	−0.631(0.407)	−16.198*** (1.966)
Asian	−6.879* (3.333)	4.847** (1.712)	−2.046(1.340)	2.158** (0.731)	−11.838*** (2.285)
Hispanic	−2.904(2.560)	−1.174(0.913)	3.598** (1.184)	1.938*** (0.427)	−7.265*** (1.995)
Other	0.058(6.231)	0.362(1.879)	−2.184(1.964)	0.550(1.004)	1.330(5.398)
Year	YES	YES	YES	YES	YES
Constant	967.842*** (191.163)	64.732(59.953)	−249.919*** (72.873)	52.137* (25.402)	1100.892*** (168.009)
Observations	39,785	39,785	39,785	39,785	39,785
R ²	0.086	0.042	0.036	0.027	0.053
Adjusted R ²	0.085	0.041	0.035	0.026	0.052

Standard errors in parentheses. ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 4. Kitagawa-Blinder-Oaxaca regression summary of housework time.

	Total Housework	Cooking	Cleaning	Shopping	Maintenance
Overall					
Men (min.)	79.322*** (0.753)	20.370*** (0.244)	14.665*** (0.286)	6.197*** (0.107)	38.090*** (0.629)
Women (min.)	147.072*** (0.843)	58.673*** (0.388)	62.474*** (0.568)	11.133*** (0.140)	14.792*** (0.322)
Difference (min.)	−67.750*** (1.131)	−38.303*** (0.458)	−47.809*** (0.636)	−4.936*** (0.176)	23.298*** (0.706)
Explained (min.)	−23.254*** (0.722)	−7.647*** (0.283)	−9.380*** (0.372)	−1.193*** (0.100)	−5.034*** (0.450)
Unexplained (min.)	−44.495*** (1.296)	−30.656*** (0.495)	−38.429*** (0.710)	−3.743*** (0.200)	28.332*** (0.900)
Observations	85,554	85,554	85,554	85,554	85,554

Standard errors in parentheses. ⁺ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$. All models control for respondent's and spouse's education in years, employment status, and usual weekly hours at work, respondent's hourly wage, her earnings share, birth year, household size, household income (log.), having children above 5, having children of age 5 and under, being born in the US, home ownership, weekday, year, and racial and ethnic belonging. Full model outputs are provided in the Appendix.

theory in different types of housework. Our findings show that the explanatory power of the theoretical approaches based on economic resources has increased, albeit very marginally, in the period between 2003 and 2019, confirming the contentions of Sullivan (2011) and England (2011).

The results indicated that resource-based factors could account for a considerable share of the housework gender gap, especially in traditionally feminine tasks. Yet, the resource-based frameworks were unable to explain the gender gap in non-routine housework like home maintenance and repairs. Moreover, the trends over time show that the explained share increased only in traditionally feminine

tasks but not in shared (gender-neutral) or traditionally masculine tasks. Although the results in this work have only one gender-neutral and one masculine task, these results suggest some differences of applicability of the frameworks by the gendered meanings of housework. The tests of different domestic tasks suggest that the shares of explained housework time might depend on the cultural meanings and gendering processes around different housework tasks. The performance of certain gendered tasks might depend more on the gendered meanings of the tasks rather than on resources, as the results for the gender gap in maintenance tasks show.

Despite the remarkable developments in housework research, a substantial part of the gender gap in housework remains unexplained. The result implies that the gender explanations to the division of housework remain relevant (Bittman et al., 2003; Brines, 1994; Greenstein, 2000). More theoretical explanations and empirical tools need to be developed to tackle gender inequality in housework participation. These results confirm the contention of the previous research (Davis & Greenstein, 2020; Lachance-Grzela & Bouchard, 2010) that gendered expectations and social norms attached to housework still play a key role in the domestic division of labor. The findings also establish that individual-level factors, on which most resource-based frameworks are based, might not be enough to resolve gender inequality at home. In this sense, the call for redirecting our focus to resource-based factors by Sullivan (2011) and England (2011) must be extended to structural and contextual factors to further the development of housework theory. A great share of the gender gap still remains unaccounted for by the current individual-level theoretical frameworks.

An alternative explanation could lie in the inadequacy of theoretical frameworks explaining the gender gap. That is, the unexplained part can also be a result of omitted variables, such as unmeasured resources or other relevant factors that the housework theory has not yet employed. Future research should aim to disentangle the frameworks that explain the gender gap from those aiming to explain the differences within the gender groups and develop both directions of inquiry.

One limitation of the present study is that ATUS-X does not contain the measures for gender attitude questions, which are commonly used for testing the gender display framework (Davis & Greenstein, 2009; Greenstein, 2000). We have tried to compensate with the use of birth year and the tests using the conceptualizations around the gendered nature of different housework tasks. Large time-use surveys might try to include the common items testing gender attitudes in the future.

Another limitation is that a large proportion of the sample does not report doing any housework on the diary day (see Table 1). This introduces a selection bias into the analysis. Although the Heckman-adjusted Kitagawa-Oaxaca-Blinder models were used in the literature before (Kolpashnikova & Kan, 2020b), the challenges with finding proper instruments to correct the bias remain unresolved. The selection bias is particularly relevant to non-routine housework tasks because fewer respondents report participation in those tasks on the diary day. Future methodological research on the issue could aim to resolve the problem with selection bias in time-use research.

Additional limitation of the present study is that we limited the analyses to four broad categories of housework tasks. This is dictated by the fact that breaking down the categories of housework tasks further reduces the coverage of the people who report doing additional tasks on the diary day, which could compromise the representativeness. However, there are time-use surveys in countries like Japan with more detailed diaries collected from larger representative samples of their populations. Future research could explore the potential of analyzing more granular categorization of housework tasks and the applicability of resource-based frameworks to strengthen or refute the findings of the present study.

Acknowledgement

This project was funded by the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 892101 (awardee: Kamila Kolpashnikova), the John Fell Fund of the University of Oxford No 7609 (awardee: Kamila Kolpashnikova), and European Research Council Consolidator Grant agreement No 771736 (awardee: Man-Yee Kan)

Disclosure statement

No potential conflict of interest was reported by the author(s).

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References

- Altintas, E., & Sullivan, O. (2016). Fifty years of change updated: Cross-national gender convergence in housework. *Demographic Research*, 35(16), 455–470. <https://doi.org/10.4054/DemRes.2016.35.16>
- Altintas, E., & Sullivan, O. (2017). Trends in fathers' contribution to housework and childcare under different welfare policy regimes. *Social Politics: International Studies in Gender, State & Society*, 24(1), 81–108. <https://doi.org/10.1093/sp/jxw007>
- Artis, J. E., & Pavalko, E. K. (2003). Explaining the decline in women's household labor: Individual change and cohort differences. *Journal of Marriage and Family*, 65(3), 746–761. <https://doi.org/10.1111/j.1741-3737.2003.00746.x>
- Batalova, J. A., & Cohen, P. N. (2002). Premarital cohabitation and housework: Couples in cross-national perspective. *Journal of Marriage and Family*, 64(3), 743–755. <https://doi.org/10.1111/j.1741-3737.2002.00743.x>
- Baxter, J., & Kane, E. W. (1995). Dependence and Independence: A cross-national analysis of gender inequality and gender attitudes. *Gender & Society*, 9(2), 193–215. <https://doi.org/10.1177/089124395009002004>
- Baxter, J. (2002). Patterns of change and stability in the gender division of household labour in Australia, 1986–1997. *Journal of Sociology*, 38(4), 399–424. <https://doi.org/10.1177/144078302128756750>
- Berk, S. F. (1985). *The gender factory: The apportionment of work in American households*. Plenum.
- Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework? Trends in the gender division of household labor. *Social Forces*, 79(1), 191–228. <https://doi.org/10.2307/2675569>
- Bittman, M., England, P., Sayer, L., Folbre, N., & Matheson, G. (2003). When does gender trump money? Bargaining and time in household work. *American Journal of Sociology*, 109(1), 186–214. <https://doi.org/10.1086/378341>
- Blair-Loy, M., Hochschild, A., Pugh, A. J., Williams, J. C., & Hartmann, H. (2015). Stability and transformation in gender, work, and family: Insights from the Second Shift for the next quarter century. *Community, Work & Family*, 18(4), 435–454. <https://doi.org/10.1080/13668803.2015.1080664>
- Blair, S. L., & Johnson, M. P. (1992). Wives' perceptions of the fairness of the division of household labor: The intersection of housework and ideology. *Journal of Marriage and the Family*, 54(3), 570–581. <https://doi.org/10.2307/353243>
- Blinder, A. S. (1973). Wage discrimination: Reduced form and structural estimates. *The Journal of Human Resources*, 8(4), 436–455. <https://doi.org/10.2307/144855>
- Blood, R. O., & Wolfe, D. M. (1960). *Husbands and wives, the dynamics of married living* (Vol. 23). The Free Press.
- Brines, J. (1994). Economic dependency, gender, and the division of labor at home. *American Journal of Sociology*, 100(3), 652–688. <https://doi.org/10.1086/230577>
- Bünning, M. (2020). Paternal part-time employment and fathers' long-term involvement in child care and housework. *Journal of Marriage and Family*, 82(2), 566–586. <https://doi.org/10.1111/jomf.12608>
- Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and Family*, 62(4), 1208–1233. <https://doi.org/10.1111/j.1741-3737.2000.01208.x>
- Coverman, S. (1985). Explaining husbands' participation in domestic labor. *The Sociological Quarterly*, 26(1), 81–97. <https://doi.org/10.1111/j.1533-8525.1985.tb00217.x>
- Craig, L., & Baxter, J. (2016). Domestic outsourcing, housework shares and subjective time pressure: Gender differences in the correlates of hiring help. *Social Indicators Research*, 125(1), 271–288. <https://doi.org/10.1007/s11205-014-0833-1>
- 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(2), 569–588. <https://doi.org/10.1007/s11205-014-0643-5>
- 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(1), 269–281. <https://doi.org/10.1007/s11205-016-1539-3>
- Craig, L. (2007). Is there really a second shift, and if so, who does it? A time-diary investigation. *Feminist Review*, 86(1), 149–170. <https://doi.org/10.1057/palgrave.fr.9400339>
- Daminger, A. (2019). The cognitive dimension of household labor. *American Sociological Review*, 84(4), 609–633. <https://doi.org/10.1177/0003122419859007>
- Davis, S. N., & Greenstein, T. N. (2009). Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology*, 35(1), 87–105. <https://doi.org/10.1146/annurev-soc-070308-115920>

- Davis, S. N., & Greenstein, T. N. (2020). Households and work in their economic contexts: State-level variations in gendered housework performance before, during, and after the Great Recession. *Journal of Occupational Science*, 27(3), 390–404. <https://doi.org/10.1080/14427591.2020.1741430>
- Doan, L., & Quadlin, N. (2019). Partner characteristics and perceptions of responsibility for housework and child care. *Journal of Marriage and Family*, 81(1), 145–163. <https://doi.org/10.1111/jomf.12526>
- England, P. (2011). Missing the big picture and making much ado about almost nothing: Recent scholarship on gender and household work. *Journal of Family Theory & Review*, 3(1), 23–26. <https://doi.org/10.1111/j.1756-2589.2010.00077.x>
- Evertsson, M., & Nermo, M. (2004). Dependence within families and the division of labour: Comparing Sweden and the United States. *Journal of Marriage and the Family*, 66(5), 1272–1286. <https://doi.org/10.1111/j.0022-2445.2004.00092.x>
- Foster, G., & Stratton, L. S. (2018). Do significant labor market events change who does the chores? Paid work, housework, and power in mixed-gender Australian households. *Journal of Population Economics*, 31(2), 483–519. <https://doi.org/10.1007/s00148-017-0667-7>
- Gager, C. T., Cooney, T. M., & Call, K. T. (1999). The effects of family characteristics and time use on teenagers' household labor. *Journal of Marriage and Family*, 61(4), 982–994. <https://doi.org/10.2307/354018>
- Gershuny, J. (2000). *Changing times: Work and leisure in postindustrial society*. Oxford University Press.
- Greenstein, T. N. (2000). Economic dependence, gender, and the division of labor in the home: A replication and extension. *Journal of Marriage and Family*, 62(2), 322–335. <https://doi.org/10.1111/j.1741-3737.2000.00322.x>
- Guppy, N., & Luongo, N. (2015). The rise and stall of Canada's gender-equity revolution. *Canadian Review of Sociology*, 52(3), 241–265. <https://doi.org/10.1111/cars.12076>
- Guppy, N., Sakumoto, L., & Wilkes, R. (2019). Social change and the gendered division of household labor in Canada. *Canadian Review of Sociology/Revue Canadienne De Sociologie*, 56(2), 178–203. <https://doi.org/10.1111/cars.12242>
- Gupta, S., Sayer, L. C., & Pearlman, J. Educational and type of day differences in mothers' time availability for child care and housework. (2021). *Journal of Marriage and Family*, 83(3), 786–802. <https://doi.org/10.1111/jomf.12754>
- Gupta, S. (2007). Autonomy, dependence, or display? The relationship between married women's earnings and housework. *Journal of Marriage and Family*, 69(2), 399–417. <https://doi.org/10.1111/j.1741-3737.2007.00373.x>
- Heisig, J. P. (2011). Who does more housework: Rich or poor?: A comparison of 33 countries. *American Sociological Review*, 76(1), 74–99. <https://doi.org/10.1177/0003122410396194>
- Hochschild, A. R., & Machung, A. (1989). *The second shift: Working families and the revolution at home*. Penguin.
- Hofferth, S. L., & Casper, L. M. (2007). *Handbook of measurement issues in family research*. Routledge.
- Hofferth, S. L., Flood, S. M., Sobek, M., & Backman, D. (2020). *American time use survey data extract builder: Version 2.8* [Dataset]. University of Maryland and IPUMS. <https://doi.org/10.18128/D060.V2.8>
- Hook, J. L. (2004). Reconsidering the division of household labor: Incorporating volunteer work and informal support. *Journal of Marriage and Family*, 66(1), 101–117. <https://doi.org/10.1111/1467-6478.00050-i1>
- Hook, J. L. (2006). Care in context: Men's unpaid work in 20 countries, 1965–2003. *American Sociological Review*, 71(4), 639–660. <https://doi.org/10.1177/000312240607100406>
- Hook, J. L. (2010). Gender inequality in the welfare state: Sex segregation in housework, 1965–2003. *American Journal of Sociology*, 115(5), 1480–1523. <https://doi.org/10.1086/651384>
- Jann, B. (2008). A Stata implementation of the Blinder-Oaxaca decomposition A Stata implementation of the Blinder-Oaxaca decomposition. *The Stata Journal*, 8(4), 453–479. <https://doi.org/10.1177/1536867X0800800401>
- Killewald, A., & Gough, M. (2010). Money isn't everything: Wives' earnings and housework time. *Social Science Research*, 39(6), 987–1003. <https://doi.org/10.1016/j.ssresearch.2010.08.005>
- Kim, S., & Chin, M. (2016). Changes in the time spent on housework of married couples: Analysis of Korea time use survey from 2004 to 2014. *Journal of Korean Home Management Association*, 34(3), 65–84. <https://doi.org/10.7466/JKHMA.2016.34.3.65>
- Kitagawa, E. M. (1955). Components of a difference between two rates. *Journal of the American Statistical Association*, 50(272), 1168–1194. <https://doi.org/10.2307/2281213>
- Kolpashnikova, K., & Kan, M. Y. (2020a). Gender gap in housework: Couples' data analysis in Kyrgyzstan. *Journal of Comparative Family Studies*, 51(2), 154–187. <https://doi.org/10.3138/jcfs.51.2.04>
- Kolpashnikova, K., & Kan, M. Y. (2020b). Hebdomadal patterns of compensatory behaviour: Weekday and weekend housework participation in Canada, 1986–2010. *Work, Employment and Society*, 34(2), 174–192. <https://doi.org/10.1177/0950017019868623>
- Kolpashnikova, K., & Kan, M. Y. (2020c). The gender gap in the United States. *Demographic Research*, 43(36), 1067–1080. <https://doi.org/10.4054/DemRes.2020.43.36>
- Kolpashnikova, K., & Koike, E. T. (2021). Educational attainment and housework participation among Japanese, Taiwanese, and American women across adult life transitions. *Asian Population Studies*, 17(3), 266–284. <https://doi.org/10.1080/17441730.2021.1920147>
- Kolpashnikova, K. (2018). American househusbands: New time use evidence of gender display, 2003–2016. *Social Indicators Research*, 140(3), 1259–1277. <https://doi.org/10.1007/s11205-017-1813-z>

- Lachance-Grzela, M., & Bouchard, G. (2010). Why do women do the lion's share of housework? A decade of research. *Sex Roles*, 63(11–12), 767–780. <https://doi.org/10.1007/s11199-010-9797-z>
- Lee, Y.-S., & Waite, L. J. (2005). Husbands' and wives' time spent on housework: A comparison of measures. *Journal of Marriage and Family*, 67(2), 328–336. <https://doi.org/10.1111/j.0022-2445.2005.00119.x>
- Neumark, D. (1988). Employers' discriminatory behavior and the estimation of wage discrimination. *The Journal of Human Resources*, 23(3), 279–295. <https://doi.org/10.2307/145830>
- Oaxaca, R. L., & Ransom, M. R. (1999). Identification in detailed wage decompositions. *The Review of Economics and Statistics*, 81(1), 154–157. <https://doi.org/10.1162/003465399767923908>
- Oaxaca, R. L. (1973). Male-female wage differentials in urban labor markets. *International Economic Review*, 14(3), 693–709. <https://doi.org/10.2307/2525981>
- Pepin, J. R., Sayer, L. C., & Casper, L. M. (2018). Marital status and mothers' time use: Childcare, housework, leisure, and sleep. *Demography*, 35(1), 107–133. <https://doi.org/10.1007/s13524-018-0647-x>
- Perry-Jenkins, M., & Gerstel, N. (2020). Work and family in the second decade of the 21st century. *Journal of Marriage and Family*, 82(1), 420–453. <https://doi.org/10.1111/jomf.12636>
- Reimers, C. W. (1983). Labor market discrimination against hispanic and black men. *The Review of Economics and Statistics*, 65(4), 570–579. <https://doi.org/10.2307/1935925>
- Sayer, L. C. (2005). Gender, time and inequality: Trends in women's and men's paid work, unpaid work and free time. *Social Forces*, 84(1), 285–303. <https://doi.org/10.1353/sof.2005.0126>
- Shelton, B. A. (1992). *Women, men and time: Gender differences in paid work, housework and leisure*. Greenwood Press.
- Stewart, J. (2013). Tobit or not tobit? *Journal of Economic and Social Measurement*, 38(3), 263–290. <https://doi.org/10.3233/JEM-130376>
- 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 & Review*, 10(1), 263–279. <https://doi.org/10.1111/jftr.12248>
- Sullivan, O., & Gershuny, J. (2013). Domestic outsourcing and multitasking: How much do they really contribute? *Social Science Research*, 42(5), 1311–1324. <https://doi.org/10.1016/j.ssresearch.2013.05.004>
- Sullivan, O. (2011). An end to gender display through the performance of housework? A review and reassessment of the quantitative literature using insights from the qualitative literature. *Journal of Family Theory & Review*, 3(1), 1–13. <https://doi.org/10.1111/j.1756-2589.2010.00074.x>
- Thompson, L. (1991). Family work: Women's sense of fairness. *Journal of Family Issues*, 12(2), 181–196. <https://doi.org/10.1177/019251391012002003>
- Treas, J., & Tai, T. (2016). Gender inequality in housework across 20 European Nations: Lessons from gender stratification theories. *Sex Roles*, 74(11), 495–511. <https://doi.org/10.1007/s11199-015-0575-9>
- Twigg, J. E., McQuillan, J., & Ferree, M. M. (1999). Meaning and measurement: Reconceptualizing measures of the division of household labor. *Journal of Marriage and the Family*, 61(3), 712–724. <https://doi.org/10.2307/353572>
- West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & Society*, 1(2), 125–151. <https://doi.org/10.1177/0891243287001002002>
- Wight, V. R., Bianchi, S. M., & Hunt, B. R. (2013). Explaining racial/ethnic Variation in partnered women's and men's housework does one size fit all? *Journal of Family Issues*, 34(3), 394–427. <https://doi.org/10.1177/0192513X12437705>
- Zhou, M. (2017). Motherhood, employment, and the dynamics of women's gender attitudes. *Gender & Society*, 31(6), 751–776. <https://doi.org/10.1177/0891243217732320>

Appendix

Cooking activities include the following codes from the ATUS-X: Food and drink preparation, food presentation, and kitchen and food clean-up.

Cleaning activities include the following: Interior cleaning, laundry, sewing, repairing, and maintaining textiles, storing interior household items, including food, and related housework.

Shopping activities include the following: grocery shopping, purchasing gas, and purchasing food.

Maintenance activities include the following: exterior cleaning, exterior repair, cleaning, and decoration, exterior maintenance, repair, and decoration, interior arrangement, decoration, and repairs, building and repairing furniture, heating and cooling, interior maintenance, repair and decoration, lawn, garden, and houseplant care, ponds, pools, and hot tubs, lawn and garden, vehicle repair and maintenance (by self), appliance, tool, and toy setup, repair, and maintenance (by self).

Imputation. We imputed variables with the most number of missing (>3%) values, particularly respondent's and spouse's work hours (each about 3.6% missing), household income (about 6% missing), and her earnings share (53% missing). We used the Markov chain Monte Carlo data augmentation to create 10 imputed samples and used averaged values across the samples for the imputed missing values (final sample $n = 85,554$).

Table A1. Kitagawa-Blinder-Oaxaca decomposition models of housework time.

	Total Housework	Cooking	Cleaning	Shopping	Maintenance
Overall					
Men	79.322*** (0.753)	20.370*** (0.244)	14.665*** (0.286)	6.197*** (0.107)	38.090*** (0.629)
Women	147.072*** (0.843)	58.673*** (0.388)	62.474*** (0.568)	11.133*** (0.140)	14.792*** (0.322)
difference	-67.750*** (1.131)	-38.303*** (0.458)	-47.809*** (0.636)	-4.936*** (0.176)	23.298*** (0.706)
explained	-23.254*** (0.722)	-7.647*** (0.283)	-9.380*** (0.372)	-1.193*** (0.100)	-5.034*** (0.450)
unexplained	-44.495*** (1.296)	-30.656*** (0.495)	-38.429*** (0.710)	-3.743*** (0.200)	28.332*** (0.900)
Explained					
Education	0.148** (0.049)	0.021 ⁺ (0.012)	0.081** (0.028)	-0.017** (0.006)	0.063** (0.023)
SP: Education	-0.046 ⁺ (0.026)	0.002 (0.007)	-0.016 (0.012)	0.000 (0.002)	-0.032 ⁺ (0.017)
Usual Weekly Hours	-13.872*** (0.790)	-3.895*** (0.289)	-4.788*** (0.409)	-0.888*** (0.122)	-4.301*** (0.550)
SP: Usual Weekly Hours	-3.533*** (0.635)	-0.440 ⁺ (0.256)	-1.588*** (0.363)	-0.375*** (0.100)	-1.131** (0.406)
Usual Hourly Wage	0.199** (0.075)	-0.027 (0.028)	0.011 (0.037)	0.044*** (0.012)	0.171** (0.053)
Employed	-6.237*** (0.535)	-2.741*** (0.216)	-3.113*** (0.311)	-0.122 (0.084)	-0.261 (0.332)
SP: Employed	-1.498*** (0.389)	-1.193*** (0.159)	-0.603** (0.218)	0.094 (0.062)	0.204 (0.253)
Her Earnings Share	0.531*** (0.094)	0.136*** (0.032)	0.243*** (0.048)	0.040** (0.013)	0.111 ⁺ (0.065)
Birth Year	0.838*** (0.112)	0.293*** (0.042)	0.120* (0.048)	0.019 (0.012)	0.407*** (0.066)
Household Size	0.373*** (0.086)	0.236*** (0.051)	0.160*** (0.041)	0.008 (0.007)	-0.031 (0.031)
Household Income (log)	-0.013 (0.015)	-0.025 ⁺ (0.014)	0.003 (0.009)	0.002 (0.002)	0.007 (0.008)
Presence of Children					
No child under 18	0.065 ⁺ (0.033)	0.084*** (0.021)	0.040* (0.018)	0.005 (0.005)	-0.064** (0.025)
Children Above 5	-0.001 (0.010)	0.023* (0.010)	-0.002 (0.006)	-0.002 (0.002)	-0.020* (0.010)
Children Under 5	0.041* (0.016)	0.015* (0.007)	0.027** (0.010)	0.006* (0.003)	-0.007 (0.007)
Born in the USA	0.019 (0.041)	0.019 (0.040)	0.007 (0.016)	0.001 (0.002)	-0.008 (0.016)
Home Ownership	-0.014 (0.039)	0.001 (0.003)	0.001 (0.004)	0.001 (0.002)	-0.017 (0.047)
Weekday	-0.067 (0.143)	-0.006 (0.013)	-0.022 (0.047)	-0.007 (0.015)	-0.031 (0.067)
Ethnic/Racial Group					
White	-0.046* (0.023)	0.024* (0.011)	-0.024 ⁺ (0.012)	0.008* (0.004)	-0.054* (0.023)

(Continued)

Table A1. (Continued).

	Total Housework	Cooking	Cleaning	Shopping	Maintenance
Black	-0.186*** (0.046)	-0.058*** (0.016)	-0.044** (0.015)	-0.011** (0.004)	-0.073*** (0.019)
Asian	-0.013 (0.022)	-0.100*** (0.022)	0.071*** (0.019)	-0.006 (0.005)	0.022 ⁺ (0.012)
Hispanic	0.072* (0.033)	0.006 (0.006)	0.062* (0.028)	0.009* (0.005)	-0.005 (0.008)
Other	0.007 (0.008)	-0.006 (0.004)	0.002 (0.005)	0.000 (0.001)	0.011 (0.007)
Year dummies	YES	YES	YES	YES	YES
Unexplained					
Education	18.645*** (6.637)	13.104*** (2.982)	27.625*** (4.014)	-1.491 (1.067)	-20.592*** (3.753)
SP: Education	17.439* (7.133)	14.000*** (3.132)	10.902*** (4.089)	-0.582 (1.159)	-6.881 (4.475)
Usual Weekly Hours	9.314** (3.408)	5.324*** (1.344)	10.403*** (1.944)	0.259 (0.572)	-6.673** (2.195)
SP: Usual Weekly Hours	1.961 (3.394)	1.111 (1.284)	-1.573 (1.801)	0.785 (0.511)	1.637 (2.407)
Usual Hourly Wage	1.260* (0.615)	0.361 (0.244)	-0.212 (0.336)	0.004 (0.105)	1.107** (0.389)
Employed	10.439* (4.551)	5.898*** (1.751)	5.187* (2.527)	0.541 (0.753)	-1.188 (3.104)
SP: Employed	-3.759 (3.962)	-0.989 (1.624)	-2.447 (2.351)	-1.569* (0.641)	1.246 (2.461)
Her Earnings Share	14.722*** (3.795)	5.604*** (1.367)	8.473*** (2.001)	1.796** (0.570)	-1.151 (2.759)
Birth Year	1368.474*** (270.055)	1008.043*** (102.985)	1024.236*** (158.301)	-4.890 (41.756)	-658.914*** (183.754)
Household Size	-16.866*** (4.796)	-10.005*** (2.426)	-9.328*** (2.646)	-0.804 (0.699)	3.271 (2.869)
Household Income (log)	64.769** (20.601)	32.619*** (9.907)	22.499 ⁺ (12.247)	-3.356 (3.310)	13.007 (11.914)
Presence of Children					
No child under 18	2.249 ⁺ (1.203)	1.888*** (0.515)	0.224 (0.653)	0.045 (0.182)	0.093 (0.822)
Children Above 5	0.455 (0.485)	-0.603** (0.202)	0.706* (0.282)	0.292*** (0.080)	0.059 (0.316)
Children Under 5	-2.176*** (0.508)	-0.474* (0.232)	-1.128*** (0.292)	-0.432*** (0.083)	-0.143 (0.304)
Born in the USA	32.523*** (3.038)	20.103*** (1.406)	9.537*** (1.883)	-0.630 (0.541)	3.512* (1.596)
Home Ownership	8.554** (2.672)	1.036 (1.121)	-1.999 (1.592)	-0.621 (0.450)	10.138*** (1.619)
Weekday	-17.297*** (1.552)	-3.508*** (0.617)	2.683** (0.890)	-1.027*** (0.272)	-15.445*** (1.028)
Ethnic/Racial Group					
White	1.485 (1.880)	2.794*** (0.794)	-2.775* (1.150)	0.054 (0.345)	1.412 (1.148)
Black	0.661* (0.260)	0.288* (0.121)	0.719*** (0.157)	-0.045 (0.049)	-0.302* (0.142)
Asian	-0.118 (0.205)	-0.411*** (0.109)	0.450*** (0.122)	0.059 (0.044)	-0.217* (0.105)
Hispanic	-2.025*** (0.510)	-0.726** (0.224)	-1.302*** (0.322)	-0.005 (0.098)	0.007 (0.282)
Other	0.081 (0.108)	0.092* (0.042)	-0.104 (0.066)	-0.011 (0.021)	0.104 (0.071)
Year dummies	YES	YES	YES	YES	YES
Constant	-1555.292*** (273.848)	-1126.226*** (104.790)	-1141.198*** (159.199)	7.885 (42.167)	704.248*** (187.334)
Observations	85,554	85,554	85,554	85,554	85,554

Standard errors in parentheses. ⁺ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$.