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**Housework and Well-being in Dual-Earner
Work from Home Households**

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Abstract

The COVID-19 pandemic has caused an unprecedented spike in work from home. Following this structural change, how much and what type of housework do men and women do in dual-earner families goes to the heart of gender inequality. We use a survey of 585 women and their spouses from urban India to explore this. To capture base level patriarchy, we propose the novel analytical frame of ‘patriarchal spectrum’ and devise a corresponding empirical measure. Controlling for household gender norms enables distilling shifts in gender division of housework. Component task analyses reveal that the housework increased for both partners, though women did more time-inflexible tasks than men. Pre-existing gender norms, availability of domestic help and women’s income matter most for partner’s willingness to take on additional housework. We reflect what this means for men and women’s leisure and well-being and implications for policy.

Keywords: Housework; Well-being; Dual-earners; Work from Home; COVID-19; Patriarchy.

1. Introduction

The difference in the amount of housework men and women do is of long-term interest to sociologists as a key to the study of gender inequality (e.g., Bianchi et al., 2000; Bittman et al., 2003; Bianchi, Robinson, and Milkie, 2006; Hook, 2010; Grigoryeva, 2017). Despite vast convergence in gender roles over the past decades, with more women taking up paid work and more men taking on housework than before (e.g., Blau and Kahn, 2000; Aguiar and Hurst, 2007; Golding, 2014), women are still regarded as responsible for housekeeping and childcare in most countries (e.g., Hochschild and Machung, 1989). In countries where gender norms are embedded in patriarchal structures, there is an even greater emphasis on housework being woman's work (Kandiyoti, 2005). This not only has consequences for women's physical and psychological well-being (Barnett and Shen 1997; Baxter 2000; Coltrane, 2000), but also impacts on their labour market outcomes (e.g., Fortin, 2005 Lidia Farré, Francis Vella, 2013). One reason why the gender gap in housework has endured is because housework remains largely hidden, typically completed while the man is 'at work' (Böhm and Land, 2012; Brown, 2020; DeRock, 2021). Even when working, women tend to take on part-time or flexible paid work so that they can juggle this around their unpaid housework, effectively subsidizing men who take on full-time roles associated with better prospects (Shockley and Allen, 2012; Thompson and Payne, 2015).

Other than total time spent on housework, the literature suggests that there are important consequences of specialization in the component tasks of housework that men and women do. Women tend to do more time-invariant household tasks that have to be performed on a regular schedule, permitting low control over whether, how, and when they need to be done (Barnett and Shen 1997; Coltrane 2000). Time-inflexible tasks that cannot be put off, such as preparing meals and washing up after meals, are more likely to limit paid work and opportunities for leisure than time-flexible tasks, that can be delayed or put off, such as washing windows or

other general cleaning (Hook, 2010). Furthermore, responsibility for housework characterized by regularity and urgency, whose scheduling cannot be controlled by the individual, is linked to psychological distress for both men and women (Barnett and Shen 1997), and who does what is actually more important for spouses' perceptions of fairness than the total time spent on housework (Baxter 2000). In this context, Coltrane (2000) writes, "it is primarily men's participation in the routine repetitive chores of cooking, cleaning, and washing that relieves women's burden, contributes to their sense of fairness, and hence lowers their chances of being depressed" (p.1225). To some extent specialization may be the result of comparative advantage (men are better at jobs that involve heavy lifting), but other factors like individual's ability to bargain are likely to have a bearing on what *type* of tasks individuals take on.

The COVID-19 pandemic has profoundly affected all aspects of work and family life across the world. Workplace closures and continued restrictions have resulted in an unprecedented spike in work from home and this has blurred the temporal and spatial boundaries between paid and unpaid work, affecting both male and female paid workers. This change is likely to have a structural and enduring influence on where and how we spend our time (see also, Fenske et al, 2020; De Stefano and Aloisi, 2021). In this milieu, housework can no longer remain 'hidden' from the men. Husbands are now exposed to the struggles their wives have had to endure in carrying out the unending household chores, especially when they are juggling paid work alongside housework. Where both partners are co-located and are confronted with similar demands from work and family, the traditional reasons for the dichotomy in gender roles are less valid. Furthermore, COVID-19 lockdowns resulted in the closure of schools and day care centers and the retraction of other domestic support increasing the need for housework and care work. These lockdowns therefore can be seen as a structural break in the organisation of households and it would be interesting to see if the allocation of housework between the partners has responded to such a break.

The potential impact of COVID-19 on gender inequality has already gathered much research interest (e.g., Alon et al., 2020; Craig and Churchill, 2021; Hank and Steinbach, 2021; Madgavkar et al., 2020). Observers have expressed concern that COVID-19 has triggered a ‘patriarchal pandemic’ that constitutes a backlash in a situation that has been characterized by a macro trend of gender convergence of roles in and out of the home (e.g., Allmendinger 2020; Andrew et al., 2020; Chemaly 2020;). Overall, in countries with more egalitarian gender norms, studies have found heterogeneous results with respect to men and women increasing their total time on housework (e.g., Craig and Churchill (2021) for Australia; Hank and Steinbach (2021) for Germany), while results from the Global South are more consistent in their findings that although men pitched in to share housework, the post-pandemic increases in time required for housework were by and large women’s burden (e.g., Deshpande, 2020; Casale and Posel, 2020). While being instructive, these summary measures obscure important dimensions of gender inequality, specifically what is happening in households where women are engaged in paid work and who does what *type* of work. These are significant questions from the perspective of equity at home and also linked to the gender differential impact of COVID-19 on outcomes in the work place.

In this paper, we draw on data collected from 585 married women who continued to do paid work from home during the first wave of COVID-19 in India to examine what happened inside ‘working’ women’s households. We call this group of households ‘softly patriarchal’: ‘soft’, because women in these households did paid work and therefore have significantly greater mobility and autonomy than would be the norm in ‘hard’ patriarchal households in India, where women would not engage in paid work; and ‘patriarchal’, because despite their paid work, these women are still likely to be the primary homemakers. Our main research question is whether the structural shift in working patterns represented by the pandemic resulted in a change to women’s workloads. Did the withdrawal of domestic help in these softly patriarchal

households, where both men and women were engaged in paid work, impact on the intra-household allocation of household chores? Specifically, did men step up to absorb some of the increase in unpaid work burden, given that both partners were doing paid work? Secondly, we consider whether the outcome differed across *types* of housework. In particular, there are some tasks that would traditionally be considered more ‘male’ (like shopping for groceries). Other activities, like cooking and caring, are seen as predominantly ‘female’. Does this gender segregation of tasks remain? Third, we will consider the implications of work from home for the distribution of leisure within the household. In this context, we also consider the effect of the husband’s contribution to different types of chores on the woman’s life satisfaction.

The COVID-19 lockdown represented a significant shift in household activities for a number of reasons. First, work from home, adopted to cope with workplace closures in the initial phases of the pandemic created different demands on individuals. While working from home saved commuting time, there were often increased requirements in terms of meetings and reporting that could be intrusive for those working from home. Second, for households, especially for working professionals, that relied on external help to manage household chores, the withdrawal of domestic help was a significant shock. Third, school closures increased the time required for childcare as well as home schooling¹. We consider whether these changes affected the extent to which these chores were shared by the partners who were facing similar demands from work and family.

This study contributes to several streams of research. We contribute to the vast literature on intra-household allocation of housework and to the specific literature on post-COVID division of housework by extending the enquiry to a specific group – urban women in paid employment. This allows us to identify the extent to which gender norms determine housework allocation

¹ According to The Economist (18th Sept, 2021) Indian schools suffered one of the world’s longest closures - an average of 69 weeks. Despite intermittent attempts to reopen school, their status remains precarious as school closure is almost the first response by the state to a hike in COVID cases and in Oct 2021 schools still remain closed in several parts of the country (Masih, 2021).

rather than economic or employment differences between the partners. Our focus moreover is on who does what and what are the ‘new’ shifts in gender distribution of the *types* of work that men and women do. Extending the focus to component tasks is important because mechanisms that influence who does what within the household may themselves be gendered (also see Kroska, 2004; Hook, 2010). This is especially true for countries like India, where housework is physically demanding and exhausting (see Pandey, 2020). Unlike in the West, few Indian homes are equipped with dishwashers, vacuum cleaners or washing machines. So, dishes have to be individually cleaned, clothes have to be hand washed and hung out to dry, and homes have to be swept with brooms and mopped. Moreover, temperate weather and culture requires time-inflexible tasks like cooking to be done every day and sometimes more than once a day. Lack of publicly provided childcare and elderly care means this burden also falls on the households. In normal times, millions of middle-class urban professionals delegate the most arduous tasks to hired domestic help and this was an important channel through which women were able to retain a presence in the labour market while also organising their household chores. We also contribute to the research on patriarchy by developing a new analytical framework called ‘patriarchal spectrum’ and also develop a corresponding methodology to capture it empirically. This framework classifies households based on how women divide their time between paid and unpaid work. Like several countries in the Global South, India is deeply patriarchal with strong social norms in relation to gender roles within and outside the household (Folbre, 2020; Kishor and Gupta, 2009). Women largely carry the burden of the household’s reproductive work and households typically operate under a ‘male breadwinner-female homemaker’ norm even if the woman is engaged in paid work. Estimates from a 2019 national survey indicate that women spend on average 5 hrs. per day on unpaid domestic work as compared to men who spend 1.6 hrs. (GoI, 2020). Women’s paid employment (where it occurs) is generally considered to be secondary to male employment and a significant proportion of a

woman's time is tied up in reproductive activities within the home (e.g., Bhandari and Dubey, 2019). Patriarchy also means that factors (like income) that should enable women to bargain for less housework may not be effective. Indeed, research suggests that prevailing gender attitudes, rather than women's involvement in paid work, matter for the allocation of housework (Geist, 2005; Stier and Lewin-Epstein 2007; Knudsen and Waerness 2008; Hwang et al., 2019).

Women's engagement in housework in India is important also because it could be influencing their labour market participation. While women's labour participation rates have been historically low in India, they have fallen steeply in recent years – from 30.3% in 1990 to 20.5% in 2019 (ILO, 2020). Urban rates have fallen faster and are far lower at around 7% (The Economist, 2021). Research suggests that women's heavy involvement in reproductive activities within the home is one of the main reasons for their lack of participation in the labour market (e.g., Rao, 2018; Bhandari and Dubey, 2019). Urban women, moreover, lack access to large family networks or publicly provided childcare, making it difficult for them to juggle housework and paid work (Folbre, 2021). By examining the structural and idiosyncratic constraints that women in paid work face with respect to sharing housework, we hope to throw further light on why women in India struggle to participate in paid work.

2. Analytical Framework

Our theoretical framework is derived from the literature on intra-household bargaining within the context of patriarchy. The fundamental question within the bargaining literature is how households allocate work/leisure decisions among their members assuming that, at any given level of income, less work and more leisure is desired by all its members. Becker (1965; 1981), who pioneered the economics thinking in this area, considered the household as a single 'unit', whose members had a homogenous set of preferences. Theoretically, this was represented by

an altruistic household head or benevolent dictator who made all decisions within the household. Empirical evidence however undermined the notion that families can be treated as sites of complete solidarity (e.g., Thomas 1990; Hoddinott and Haddad 1995).

This paved the way for the paradigm of collective bargaining that incorporated heterogeneity in preferences between the negotiating male and female heads of household, mimicking real-life decision-making more closely (see seminal contributions by Manser and Brown, 1980 and McElroy and Horney, 1981).² This framework accommodates multiple bargaining scenarios and, within it, the bargaining power wielded by each household member, which is crucial to the outcome (McElroy and Horney, 1981; Lundberg and Pollak, 1996). Bargaining power is determined by an individual's relative fallback position or outside option and therefore crucially depends on their ability to live independent of the household, which in empirically is measured by indicators like age, education, individual income and access to parental or other wealth. The fall-back position is also significantly determined by the gender norms that prevail in society as well as within the household. In essence, patriarchal gender norms may significantly curtail women's outside options and result in extremely unequal fallback positions, i.e., women may be coerced into cooperation and work-leisure allocation decisions may closely represent the preferences of the male, emulating Beckerian outcomes (e.g., Folbre, 2020).

In this paper, we define patriarchy as 'the unequal distribution of power between men and women in certain aspects of life, both within and outside the household'. There are many ways in which patriarchy reveals itself – patrilineality, preference for boy child, a traditional division of labour, limited autonomy, constrained mobility for women and gender violence are some of its many manifestations. Patriarchy can influence the allocation of housework in two ways.

² For a useful overview of bargaining literature and extensions to the basic model see McElroy (1990, 1997); Ott (1992); Alderman et al. (1995); Bergstrom (1996); Haddad et al. (1997); Browning and Chiappori (1998). For early applications of this framework to low-and-middle-income countries see Alderman et al. (1995); Agarwal (1994, Chap. 2); Sen (1990); Dasgupta (1993, Chap. 11).

First, as a social norm, it directly fuels the ‘male-breadwinner and female-homemaker’ paradigm that imparts a greater share of housework to women irrespective of individual preference. Second, it does so by influencing women’s own preferences so that they closely align with societal expectations of gender roles. This alignment is referred to as ‘adaptive preferences’ (Elster, 1982; Sen, 1984; 1999; Nussbaum, 2000, 2001). Thus, uneven allocation of housework may then not only reflect male preferences but also reflect what women consider as ‘appropriate’ for their role in society. This is because, in a patriarchal context, *men and women acquire their sense of identity from social norms and values that embody, produce and legitimise housework as women’s work* (see also Teschl and Comi, 2005; Bruckner 2009; Hallerod, 2006; Khader, 2011; Kabeer, 2017).

These effects mean that, in the presence of patriarchy, an improvement in women’s fall-back position, say, as a result of her paid work, may be ineffective in improving her position within the household. In fact, several observers argue that gender norms around housework made women in paid work worse off by creating a double work-day for them, often referred to as women’s ‘double-burden’ (e.g., Bianchi et al., 2000; Bittman, J Wajcman, 2000; Sullivan, 2000; Patterson 2002; Doak et al., 2005; Gershuny, 2003; Sayer, 2005; Gershuny and Bittman, 2005; Craig, 2006; 2007). The influence of patriarchy on allocation of housework is so enduring that Kandiyoti (2005) asserts the need for “rethinking bargaining with patriarchy”.

In a novel analytical approach to enable such rethinking, in this paper, we propose that households can be classified along a ‘patriarchal spectrum’ depending on how women spend their work time. Table 1 below identifies households at the extremes of this classification. We define traditional or ‘hard’ patriarchal households as those in which women are unable to participate in paid employment and are encumbered with the responsibility for all household chores. In these households the gender dichotomy between paid work and unpaid housework is absolute. As households move along the patriarchal spectrum, women are permitted to work

outside their homes but continue to retain most of the responsibility for the housework and care work. Indeed, some of the inequity may be reflective of the phenomenon of ‘adaptive preferences’ wherein women themselves see housework as ‘feminine domain’ and men doing housework as embarrassing and shameful. So even after ‘hard’ patriarchal attitudes towards women’s paid work are relaxed, patriarchy with regard to who does housework continues to prevail. These are the households we refer to as ‘softly’ patriarchal. It is in these households that bargaining around the allocation of housework is most likely to happen in response to the structural shifts in location of men and women’s paid work.

The extent to which a household is ‘softly’ patriarchal is core to our empirical analysis. It is in these households that women do paid work and therefore there is room for negotiation regarding household chores. Amongst these households, the extent to which unpaid housework is shared between spouses is likely to vary. As part of our empirical strategy, we therefore create a ‘soft-patriarchy index’ which measures how much of the housework is shared between the spouses in typical circumstances. The more housework the spouses share, the ‘softer’ the patriarchy is within the household. In the context of the structural changes that led to an increase in work from home and an increase in housework post-COVID-19, we expect that the softer the patriarchy, the smaller will be the increase in women’s household burden following the lockdown.

Table 1. The Patriarchal Spectrum: Classifying Households by Women’s Work

Household Type	Woman’s Work	Unpaid House Work	Paid Work
Hard Patriarchal		Managed entirely by woman	Don’t participate
Soft Patriarchal		Managed almost entirely by woman	Participate
Non-Patriarchal		Shared with spouse	Participate

3. Context and Data Collection

In response to the first wave of COVID-19, India went into a national lockdown on 25th March 2020, which continued in phases till 31st May. Several observers and media outlets reported it to be the one of the strictest lockdowns in the world (Rukmini, 2020; IMF, 2020). The Stringency Index, which measured the harshness of lockdowns – gave India's lockdown the maximum possible score of 100 (Government Response Tracker, 2020).

Immediately after the lockdown was announced, it became apparent that households were experiencing an increase in their reproductive work. School closures shifted the burden of day-care and supervision with e-schooling on households. Closure of restaurants, takeaways and roadside eateries shifted the entire burden of food provision on households. Further, households that relied on part-time domestic help for routine household chores like meal preparation, laundry and cleaning were no longer able to access this help. Overnight, all the external service providers that enabled soft patriarchal households juggle their paid and unpaid work were withdrawn. The three authors of this research have individual histories which encompass experiences of living in similar households and were hence tuned into the changes in the living experiences of sequestered households and working women in them. From our familial and professional networks, we picked up new and unprecedented happenings. The most intriguing of these was that men married to working women, who had previously done little housework, were now taking on various chores and learning new skills. Indeed, preliminary data suggested that among urban professional couples who had to manage without part-time domestic help, men pitched in to share housework, contributing one hour more when compared to women who contributed just 36 minutes more than before (Deshpande, 2020).

We recognised that these sequestered experiences embedded a social experiment that had the potential to challenge traditional patriarchal norms around housework which, despite the advances in women's education, had contributed to low female labour market participation. In

this context, it became important to record these experiences and to identify trends, especially in terms of who took on what *type* of housework and its impact on work burdens, on paid employment and on the well-being of both men and women.

Following this, a research project was conceived and ethics approval was obtained from the researcher's universities (Refs: UL7720; UREC20/04/2020) in April 2020. The intent was to examine how sequestered dual-earners managed housework during the first lockdown in India, specifically how much help did men provide. Our focus was to find if structural changes in work patterns and increase in housework due to the lockdown caused a shift in patriarchal 'adaptive preferences' and if there was a greater acceptance of more equitable sharing of housework among dual-earners. We also wanted to understand the *type* of chores that men and women took on and its impact on their leisure, rest and well-being.

Given these objectives, we decided to use a survey-based approach mainly aimed at working women who continued to carry out paid work from their sequestered homes and also surveyed their spouses. As face-to-face fieldwork was not possible, we carried out a web-based survey using Google Forms.³ We partnered with Streedhan, a New Delhi based NGO that works on gender issues in India to support with administering the online survey. Streedhan actively utilised digital media like Facebook and Twitter to widen the survey coverage across the urban reaches of India. Participation was incentivized by inviting respondents to enter a lottery for Amazon vouchers ranging from Rs 1,500 (£15) to Rs 7,500 (£75). It is important to acknowledge that these data collection strategies influence the sample characteristics, in that the research participants have a very specific profile – other than doing paid work, they have a social media presence, they shop online and have a working knowledge of English. As such, our sample constitutes a very specific group of urban women in India. Data collection was carried out between 25th April to 25th May 2020.

³ This survey is available as an online appendix at <https://docs.google.com/forms/d/1xRFoo7XntXznUl6EmUINzsdBoq38uNHnaWJzrSLVVI4/edit?usp=sharing>

A total of 585 women responded to the survey. Respondents were also invited to submit open-ended reflections on their overall experience of managing housework while working from home. The wording of this question was kept neutral (“Is there anything about your lockdown experience that you'd like to share with us?”), no specific theme was suggested so participants were guided solely by what they perceived as important. A total of 314 women chose to respond to this section and we coded these responses into six overarching themes and sub-themes: patriarchy; negotiating housework; loss of domestic help; women’s double-burden; partner sharing housework; partner not sharing housework. We use a selection of these quotes to add nuances to our statistical results.

Note that we solicited information on *types* of household tasks done by different members of the household as opposed to using a time-use survey. While time-use surveys are useful to gain an insight into how the respondents used their time within a reference period, our aim was to gain a dynamic understanding of how tasks were managed before and after the structural changes that blurred the boundaries between paid and unpaid work. A traditional time-use survey covering *types* of tasks would have encountered recall errors and survey fatigue (see Gershuny, 2012; Baghal, 2014). Additionally, the survey used an online format which precluded any human interaction and revisits that may have afforded some mitigation. To test this, we carried out an online pilot using a time-use format with working women within Streedhan’s internal network. The results confirmed our intuition on recall and fatigue. On balance therefore, we decided to go with the less comprehensive format of ‘who does what’ both due to it being less reliant on precise recall and taking less time thus affording both, more accurate information and a greater probability of survey completion.

4. Empirical Strategy

In order to understand how each partner contributes to household chores post-lockdown in softly patriarchal settings, we consider three questions. First, we ask whether the household chores done exclusively by the wife have increased following the lockdown. In this context, we also examine whether the partner's contribution has increased during this time. Second, we ask whether the contribution of the partner varies across the different tasks in the household. In particular, we consider which *types* of tasks partners are more likely to help with. Third, we ask if these differences in the involvement in household tasks are reflected in the amount of leisure enjoyed by men and women, and implications for their life satisfaction.

4.1. Have women's chores increased and do partners help more when working from home?

To understand whether women's housework increased, we begin by analyzing the overall number of activities being done by her alone. To do this, we create an index of all the chores done by the wife within the household before and during the lockdown. We create the index by using Principal Component Analysis (PCA), which is a statistical technique used to optimally reduce the dimensionality of data when the initial data has a set of correlated variables.⁴ We have eight distinct chores in our data: cooking, washing up after meals, cleaning, laundry, cleaning bathrooms, childcare, eldercare and grocery shopping. PCA creates a set of uncorrelated indices or components where each index is a weighted linear combination of the initial set of variables. We retain the first component for this variable as our reduced index.

We start by considering the difference in the value of this composite index before and after the lockdown.

Model 1a:

$$Y_i = \alpha + \beta \Delta DH_availability_i + \gamma soft\ patriarchy\ index_i + \delta X_i + \epsilon_i$$

⁴ For an intuitive explanation of the PCA method see Shlens (2014). <https://arxiv.org/pdf/1404.1100.pdf>

Here for the i th household, Y_i is the change in the PCA index of household chores done by the woman alone before and during the lockdown, i.e., $Y_i =$

$(PCA\ index\ of\ hh\ chores\ done\ by\ woman\ alone\ during\ work\ from\ home)_i - (PCA\ index\ of\ hh\ chores\ done\ by\ woman\ alone\ pre - lockdown)_i$. The variable DH_status_i indicates the change in availability of domestic workers to the household and the variable *soft patriarchy index* is our measure of the level of soft patriarchy as defined in Section 2. We discuss these two variables in detail below.

Over half the households in our sample (310, 53.36%) relied on external paid domestic help that was suddenly withdrawn during the lockdown. For these households, the withdrawal of help during the lockdown would have led to increased housework. To consider whether this change in household help affected the woman's own burden of chores, we include a variable $\Delta DH_availability_i$. This variable captures the change in the availability of domestic help as a consequence of the lockdown.

We also control for whether the partner helped in household chores before the lockdown. We call this the *soft patriarchy index_i*, a PCA index of all activities that the partner helped with in the pre-lockdown period. The higher this index, the more help the partner provided in pre-lockdown times and the less patriarchal are the norms under which the household functioned. The more help a partner offered before, the more tasks we might expect him to help with during the lockdown. Our sampled households are expected to lie along the 'patriarchal spectrum' somewhere between hard patriarchal and non-patriarchal households.

Finally, we include a range of controls (X_i) in our estimations and these include a vector of individual (age and religion), household (number of bedrooms, household size, number of boys and girls under the age of 16) and occupational characteristics (employment status, earnings and flexibility of work and partner's work). The coefficient β represents the effect of the lockdown (reflected in the loss of household help) on household chores done by the partners.

Given the short time period being considered, most of the household characteristics like individual's age, religion, family size, number of sons and daughters, number of bedrooms - do not change between the two periods. There are, however, some work-related characteristics that change like commuting time, frequency of reporting to line manager.

To analyze whether the partner's contribution increased after he started working from home, we create an index for the chores that he helped with both before the lockdown and during it.

Our estimated model then is:

Model 1b:

$$Y_i = \alpha + \beta \Delta DH_availability_i + \delta X_i + \epsilon_i$$

Here, Y_i is the change in the index of household chores done jointly with the partner before and during the lockdown, i.e., $Y_i =$

*(PCA index of hh chores husband helps with or does alone during work from home)*_{*i*} –

*(PCA index of hh chores husband helps with or did alone pre – lockdown)*_{*i*}. The

covariates in the above model are similar to those described earlier for Model 1a.

4.2. What types of housework did husbands and wives take on when working from home?

Our second research question relates to whether there was a differential contribution by the husbands and wives based on the specific chores being considered. This is important given that previous research suggests that time-invariant tasks are typically done by women and this impacts their ability to get involved in paid work and also affects their psychological well-being (ex. Coltrane, 2000; Hook, 2010). To answer this question, for each of our eight chores, we consider the identity of the person doing the chore - the woman herself, her spouse, her son, daughter, paid domestic help or other member of the household like grandparents. Our questions relate to whether the woman did the task alone or had help. If she had help, we then consider whether she was helped by her spouse, or by somebody else in the family.

To capture the effect of lockdown on different chores we reorganize our data in the form of a pseudo panel. To do this, we create two periods - one corresponding to the individuals' pre-lockdown experience (*time1*), and one corresponding to the individuals' experience during lockdown (*time2*). Since the data was collected only at *time2*, the observations for *time1* are based on the individual's memory of that period. Also, the individual characteristics are only captured for the period when the questionnaire was being answered. We assume that these characteristics do not change (the individual's age, religion, family size, number of boys and girls, number of bedrooms). Occupational characteristics did, of course, change during lockdown⁵.

We estimate the following separately for each of the eight household chores

Model 2:

$$Y_i = \alpha + \beta * time + \delta * Soft_patriarchy\ index_i + \varphi * X_i + \epsilon_i$$

Where Y_i is a categorical variable which takes value 1 if the woman does the specific chore alone, 2 if the woman has help from her spouse and 3 if the woman has help from anyone else but not her spouse. Since these are discrete (but unordered) outcomes, we estimate this model using a pooled multinomial logit model with category 1 (the woman does the chore alone) as the base category. The variable: *time* takes value 1 for the pre-lockdown (usual) period and 2 for the lockdown period. We also include a soft patriarchy index that measures partner's contribution to household activities before the lockdown. Additionally, we control for various personal and work characteristics in line with Models 1a and 1b.

4.3. Does differential involvement in household tasks impact on leisure and life satisfaction?

⁵ We note here that there are two potential mechanisms through which work from home might change the distribution of chores between different family members. Partners may be doing more housework because they are spending more time at home, but also because of the sudden loss in paid household help. We cannot separate out the two effects in our data. Our results therefore give us the combined effects of the two mechanisms.

The increased burden of household chores might have been expected to decrease leisure and therefore also life satisfaction during the lockdown. However, anecdotal evidence suggests that greater sharing of household tasks and more family time might well have positively affected life satisfaction. We therefore consider the impact of the lockdown on women's leisure and life satisfaction. In particular, we are interested to see if there are some tasks in which the partner's help results in higher levels of leisure and psychological well-being in comparison to others. As mentioned earlier, some of the household chores are significantly more onerous and time-invariant than others. This is especially true for India due to a combination of factors like tradition, lack of mechanization, weather (hot and humid) and urban living (dust and pollution). We will consider whether help with the various tasks makes a difference to the leisure and life satisfaction experienced by the woman.

Model 3a:

$$Rest_i = \alpha + \beta * time + \gamma * husband_help_chore_i * + \varphi * X_i + \epsilon_i$$

Model 3b:

$$Life\ Satisfaction_i = \alpha + \beta * time + \gamma * husband_help_chore_i + \varphi * X_i + \epsilon_i$$

Where the variable $Rest_i$ is a measure of the individual's rest time, defined as the number of hours the woman sleeps and takes value 6, 7 or 8. We use sleep as a proxy for leisure for two reasons. First, sleep is a more fundamental component of rest and leisure and changes to it are shown to have a clear impact on psychological well-being (Chow, 2020). Second, as many of the activities typically associated with leisure were not available during the time of the survey there is likely to be an inherent bias in its reporting. The variable $Life\ Satisfaction_i$ corresponds to each partner's response to the question "how satisfied are you with your life" and takes value from 1 to 10. We estimate these equations using a pooled ordered logit model.

In the above models, the explanatory variable *husband_help_chore* represents whether or not the partner helped in the eight different chores. The variable takes value 1 if the partner helps with the chore at hand, and 0 otherwise.

5. Housework When Both Husband and Wife Work from Home

5.1. Sample Characteristics and Summary Statistics for Housework

The personal characteristics for the participants are presented in Table 2. The average age of the women respondents is 34.5 years, with 81% reporting to be the followers of the Hindu religion. Participants mostly live in urban locations, with 41% from the North (mainly Delhi) and 46% from the West (mainly Mumbai). The average household size in the sample was just under 4 and about one third of the respondents have one child or more. In terms of individual earnings, 17% of the women and 9% of their partners earned below 20,000INR pm (~£200) while about 25% of the women and 38% of the spouses earned 80,000INR pm (~£800) or more.⁶ About 71% of these women are employed fulltime and 21.5% are self-employed. The self-employed women are expected to enjoy more flexibility. Among the partners, 74% are in fulltime employment and 19% were self-employed. Before lockdown, nearly all had to commute daily with around 50% of both men and women commuting one hour or more to and from work. With respect to housework, 83% of the wives in our sample reported that they spent more time doing housework than before, and 35% reported that they spent more time doing paid work than before. 29% of women reporting an increase in time-spent in housework as well as paid work and 19.34% of men reported the same.

⁶ The average monthly earning for India is 32,800INR pm.

Table 2: Personal Characteristics: Summary Statistics

Variable	<i>N</i>	<i>Mean</i>	<i>Std. Dev.</i>	<i>Min</i>	<i>Max</i>
Age	584	34.548	8.331	21	63
Number of bedrooms	585	2.304	0.995	1	8
Household size	585	3.831	1.648	2	12
Boys below 16	585	0.335	0.592	0	6
Girls below 16	585	0.361	0.698	0	6
	<i>N</i>	<i>%</i>			
Hindu	475	81.20			
Regional Zone					
Central	4	0.7			
East	6	1			
North	242	41.4			
South	64	10.9			
West	269	46			
	Woman		Partner		
Variable	<i>N</i>	<i>%</i>	<i>N</i>	<i>%</i>	
Earnings PM					
Below 20,000	93	16.5	53	9.45	
20,0000 to 45,0000	180	32	133	23.7	
45,000 to 80,000	150	26.6	164	29.2	
Above 80,000	140	24.9	211	37.6	
Employment status					
Full Time	415	70.9	432	74.4	
Part Time	44	7.5	15	2.6	
Self Employed	126	21.5	113	19.4	
Commute time					
Work from home	108	18.7	76	13.3	
Less than half hour	71	12.3	86	15	
Less than one hour	85	14.7	106	18.5	
Between one and two hours	176	30.5	158	27.6	
More than two hours	137	23.7	147	25.7	

Table 3 summarizes the changes in the burden of housework being done alone by the wife during lockdown. The column ‘difference in mean’ suggests that more women did the cooking, washing up after meals, general cleaning and laundry alone during lockdown in comparison to usual times by no significant difference in either childcare or eldercare alone. This is not surprising because prior to the lockdown, many of these tasks would have been done with domestic help. Carrying out these time-invariant tasks certainly seems to have

contributed to women's experiences of double-burden as reported by several of the participants. Respondents indicated this in many ways. For instance, *"During lockdown have ended up working more on household chores than before along with office work and handling kids so it's literally been a slog for me."* (age 32, Executive Assistant); *"I have to take care of 80% house hold work along with managing my official work."* (age 27, Legal Department); *"No work life balance, exhausting"* (age 36, Manager)

We also report changes in partners' help in housework and the amount of housework done alone by the partner during the lockdown. We find that partners' help increased in all eight of these activities during lockdown. However, the proportion of partners doing chores alone is much smaller than that of woman doing these chores alone. In fact, the only chore that more men were likely to do alone than women were grocery shopping (27% men did it alone during the lockdown in comparison to 19% women who did it alone). The other chore that a high proportion of men did alone during the lockdown was cleaning bathroom (11%). It is worth noting that both these tasks are more time-flexible and their schedule can be controlled by the person responsible for them, unlike the routine mandatory chores that women tended to do alone. The gender differences in the attitude to *types* household chores was also evident in experiences shared by participants. Thus, women in the survey said, *"Men do not take responsibility for household work"* (age 31, Manager); *"if they do one chore, they'll sing praises and make sure we don't forget"* (age 25, Business Development Manager); *"when your partner supports only per their need and desires, it gets irritating"* (age 33, Operations Manager).

Table 3 Changes in household chores done alone by woman, partner's help and household chore done by partner (N=585)

	Changes in woman doing chores alone			Changes in partner helping with chores			Changes in partner doing chores alone		
	Mean Lockdown	Mean Usual	Difference in mean (lockdown- usual)	Mean Lockdown	Mean Usual	Difference in mean (lockdown- usual)	Mean Lockdown	Mean Usual	Difference in mean (lockdown-usual)
Chores									
Cooks alone	0.425	0.335	0.09*** ¹	0.366	0.221	0.145*** ¹	0.011	0.005	0.005
Washing up alone	0.33	0.179	0.15***	0.427	0.155	0.272***	0.06	0.021	0.04***
Laundry alone	0.381	0.332	0.05**	0.383	0.248	0.135***	0.089	0.054	0.034***
Cleans house alone	0.309	0.163	0.147***	0.416	0.164	0.252***	0.07	0.031	0.04***
Cleans toilets alone	0.385	0.252	0.134***	0.427	0.27	0.158***	0.116	0.072	0.044***
Childcare alone	0.181	0.173	0.009	0.34	0.292	0.048**	0.026	0.021	0.005
Eldercare alone	0.154	0.173	-0.019	0.347	0.327	0.021	0.052	0.041	0.011
Grocery alone	0.193	0.274	-0.081***	0.716	0.597	0.12***	0.269	0.166	0.103***

Note:

1. *** p<0.01, ** p<0.05, * p<0.1

5.2 Changes in women's housework burden when both men and women work from home

In this section, we analyze our first two research questions: did women have to manage more household tasks and did men provide more help whilst working from home, especially since households experienced a withdrawal of external help during the lockdown. Table 4 provides the results for women doing housework alone (columns 1 and 2), and for partner's help (columns 3 and 4). Our results indicate that the loss of paid domestic help caused an almost 7% increase in women doing household chores alone. Interestingly, we find that it increased partner's involvement in housework significantly more, by nearly 17%. Thus, we find that while women did take on many of the chores previously done by domestic help, men also helped more with many of these activities. We also find that the increase in housework for women in households that did not see any change in help availability was 11% less than the households that lost help. For such households the increase in husband's help was 16% less in comparison to those that lost help.

Turning to the impact that partner's help might have on the woman's household burden, we find that the soft patriarchy index is negative, indicating that irrespective of changes in domestic help, households in which the partner helped typically were ones in which help from partners with housework increased significantly (by nearly 20%) during lockdown. The increase in help was smaller in households where domestic help was unchanged (6%), though it was still positive and significant. Once again, that base level patriarchy mattered for how much help women received during lockdown was also apparent in quotes by participants.

- *"I get up. Make bed, tea for my partner and his mother. Then start with cleaning the house, washing utensils, washing clothes, make breakfast and lunch then take bath and then sit to do my office work till 5 pm. Then make tea, snacks, dusting, make dinner, then clean utensils, massage my partner's mother, then wash the kitchen, then I get off to sleep."* (age 27, Human Resource Manager)
- *"Difficult time but happy that we are together and safe. My partner helps me a lot in my work. He can't cook else he does everything else."* (age 48, ~)
- *"I got free space for myself even after extra daily chores. My partner helped me a lot."* (age 29, Analyst)

Amongst the controls (reported in appendix table A1), we find that the higher are partner's earnings, the less likely he is to increase help during lockdown, and the more likely that the woman faces an increased burden of chores. We also find that for households with boys below 16 years old, partners were less likely to increase their contribution, while the women saw an increase in chores during lockdown. The number of girls below 16 doesn't seem to affect the chores done by either parent. This might reflect a strengthening of patriarchal norms which prioritize boy children. In a similar vein, Pollmann-Schult (2015) find that having daughters makes men adopt a less egalitarian attitude towards sharing housework and this may be a plausible mechanism for intergenerational transmission of gender roles (see also Cordero-Coma and Esping-Anderson, 2018). Women's experience of intergenerational patriarchy among our participants was obvious when they said "*Elders in household need to revisit ethos. Like men [in the] house can't work. Really?*" (age 33, Manager); "*Men should be brought up in a way that they know all the household chore*" (age 32, Teacher)

These narratives suggest that men are willing and, in many cases (also see quotes in Sect. 6), able to overcome their patriarchal way of life to support their wives with household chores. Some of the shared experiences suggest that work from home has exposed men to the struggles women face ("*Lockdown made my people to realise how hard I work in and out*", age 40, Shopkeeper), and men who have never before done housework have tried to take this on and several succeeded. These households, at the margins of patriarchy, are likely to have experienced more gender equitable sharing of housework during the lockdown period.

Table 4. OLS model with dependent variables difference in PCA index of housework done by woman alone (Model 1a) and with partner's help (Model 1b)¹

VARIABLES	Model 1a		Model 1b	
	(1)	(2)	(3)	(4)
	Difference in index of woman doing housework alone	Difference in index of woman doing housework alone	Difference in index of partner helping	Difference in index of partner helping
Lost Domestic Help ²	0.068*** ³ (0.022) ⁴		0.169*** (0.024)	
No change in domestic help		-0.110*** (0.019)		-0.162*** (0.020)
Soft patriarchy index	-0.196*** (0.046)	-0.062** (0.031)		
Constant	0.049 (0.088)	0.116 (0.076)	0.028 (0.142)	0.181 (0.136)
Observations	378	523	378	523
R-squared	0.132	0.128	0.139	0.152

Notes:

1. Individual and household controls included in all the models. Coefficients of additional covariates reported in Appendix Table A1
2. The variable “Lost Domestic Help during lockdown” takes value 1 if the household usually has domestic help but not during lockdown and 0 if household has domestic help both before and during lockdown. The variable “No change in domestic help” takes value 1 if household didn't have help before or during lockdown or the household had help both before and during lockdown and 0 if the household had help before lockdown and didn't have help during lockdown
3. *** p<0.01, ** p<0.05, * p<0.1
4. Robust standard errors in parentheses

5.3. Types of chores that partners and wives took on while working from home

To consider next if the partner's help differed across *types* of household chores, we estimate Model 2 discussed earlier, using a pooled multinomial logit estimation. Table 5 presents the marginal effects of this estimation where the base category is ‘the woman does the chore alone’ and the other two categories are ‘partner helps’ and ‘others in the household help’. We run the model separately for each of the eight different chores. Since we want to look at the effect of the loss of household help, we drop the households that continued to have help during the lockdown. Panel 1 presents the results for the partner's help in the different chores. We see that work from home has a positive effect on the help that partners provide in cooking, washing up

after meals, laundry, cleaning, cleaning toilets as well as grocery shopping. Like for wives, the lockdown has not increased the husband's contribution to care-related chores (childcare or elder care)⁷. Open-ended quotes again supported the finding that housework was being actively negotiated, increasing men's participation in activities across these.

Turning to other variables that determine partner's help - we find that the index for soft patriarchy is significant for all the chores except childcare. We also find that for larger household sizes and for older women, the partners are less likely to help suggesting again the presence of patriarchy (reported in extended Table A2). The woman's earnings have positive impact on partner's help in some chores (cooking, doing dishes, eldercare and grocery shopping), but have negative impact on the husband's help in cleaning. The partner's earnings and the flexibility of work for both the woman herself and her partner impacts some chores, but not all.

Overall, our results suggest that when both the woman and her partner are working from home, woman's housework increases, especially in terms of the number of tasks they now perform alone, however, partners have also increased their contribution across nearly all tasks. This effect is more pronounced in households that have lost external domestic help due to the lockdown. Another significant result is that base level patriarchy is an important predictor of whether housework is shared between couples' in challenging times. Not surprisingly, partners who helped with housework typically are more likely to also help when housework increases due to a structural shift. A number of other results are worth noting: men were more likely to take on sole responsibility for time-flexible tasks like grocery-shopping and cleaning, where scheduling could be controlled by them. Women, on the other hand, were more likely to carry out time-inflexible tasks like cooking and cleaning after meals on their own. Women and men's

⁷ In the Appendix table A3 we consider an alternative index of soft patriarchy which is created using a principal component reduction of husband's help in all the chores, excluding the chore at hand. We find the results to be similar to those presented in table 5 indicating that our findings are robust.

earnings also had the effect that one would expect, higher earnings meant lower household burdens for both. Our evidence also shows that the presence of boy child reinforced gender roles in the household, suggesting a potential route for the transmission of intergenerational patriarchy. Other work-related variables like flexibility in work schedules has little impact on housework.

Table 5: Multinomial logit model with dependent variable: who does what housework (Model 2, base category: woman alone, marginal effects)¹

VARIABLES	(1) Cooks	(2) Does Washing up	(3) Does Laundry	(4) Cleans the house	(5) Cleans toilets	(6) Childcare	(7) Eldercare	(8) Grocery Shopping
Panel 1: Category: Partner helps								
Lockdown	0.159*** ² (0.044) ³	0.250*** (0.042)	0.119*** (0.044)	0.162*** (0.044)	0.234*** (0.050)	0.095 (0.000)	0.100 (0.063)	0.193*** (0.052)
Soft Patriarchy Index	0.586*** (0.045)	0.623*** (0.038)	0.829*** (0.053)	0.675*** (0.050)	0.856*** (0.059)	1.260 (0.000)	1.004*** (0.096)	0.723*** (0.090)
Panel 2: Category: Others help								
Lockdown	-0.263*** (0.045)	-0.409*** (0.035)	-0.210*** (0.045)	-0.350*** (0.042)	-0.331*** (0.041)	-0.077 (0.000)	-0.127** (0.050)	-0.064* (0.037)
Soft Patriarchy Index	-0.031 (0.070)	-0.117* (0.063)	-0.141** (0.071)	-0.113* (0.066)	-0.346*** (0.080)	-0.188 (0.000)	0.148* (0.082)	-0.165*** (0.063)
Observations ⁴	859	859	859	859	859	491	488	859

Notes:

1. Individual and household controls included in all the models. Marginal effects of additional covariates are reported in Appendix table A2
2. *** p<0.01, ** p<0.05, * p<0.1.
3. Robust standard errors in parentheses
4. Some observations have missing values for variables associated with own earnings, partners earnings and nature of partner's work in one or both periods which results in the number of observations not adding up to 1170.

6. Impact of working from home on women's rest time and life satisfaction

In this section, we examine the effect that the changed status of household work has on the rest and well-being of women and their partners. For both men and women, the increased involvement in household chores may imply fewer hours of rest and this in turn could imply lower life satisfaction. On the other hand, working from home also implies fewer hours of commuting and greater sharing of household chores, which can meaningfully add to leisure and happiness. Previous research also suggests that the *types* of tasks men and women do (more than the total time they spend on housework) has implications for their physical and psychological well-being, where spouses help with routine repetitive chores is what matters for happier lives (Barnett and Shen 1997; Baxter 2000; Coltrane, 2000).

Our summary statistics in Table 6 indicate that, on average, the women's sleep time increased during the lockdown (from an average of 6.99 hours to 7.26 hours) but that her life satisfaction reduced significantly (from the value of 7.69 to 6.46 on a 10-point scale). Similarly, for the partner sleep time has increased, while life satisfaction fell, though at a lower rate than for the wife. For the partner, the reduction of life satisfaction was from 8 to 7.06 on the same 10-point scale.

Table 6 Changes in rest (sleep) and life satisfaction for woman and partner¹

	Woman			Partner		
	Mean		Difference in mean (LD- Usual)	Mean		Difference in mean (LD- Usual)
	Lockdown	Usual		Lockdown	Usual	
Rest	7.261	6.99	0.272*** ²	7.454	7.206	0.248***
Life satisfaction	6.457	7.689	-1.232***	7.066	8.008	-0.943***

Note:

1. Sleep data was available only for 579 women and 577 men. Partner's life satisfaction data was available for 245 individuals
2. *** p<0.01, ** p<0.05, * p<0.1

We next consider the effect that the partner's help in the different chores had on the woman's leisure and life satisfaction. In table 7a we report the odds ratio of our ordered logit model with dependent variable 'woman's rest' (measured by the number of hours that the woman sleeps, taking value 6, 7 or 8). We find that once we have controlled for other factors, the lockdown doesn't seem to affect the number of hours women sleep. However, while her partner's help in time-invariant tasks like cooking and washing up after seems to have a positive and significant effect on the hours that the woman sleeps, time-flexible tasks like cleaning the house and grocery shopping have no impact. In a corresponding table in the appendix (Table A4), we present the results of the estimation including our control variables. We find that being in flexible work and partner's earnings increased sleep for the woman while partner working reduced her sleep hours.

Table 7b reports the effect of lockdown and partner's help in different chores on the woman's life satisfaction. We find that the woman's life satisfaction falls as a consequence of lockdown. We find that the lockdown results in odds of being in a higher category of well-being is about 75% lower in the lockdown period in comparison to the pre-lockdown period (odds ratio between 0.23 and 0.26). However, the partner's help in cooking, washing up, laundry, cleaning both the house and toilet and elder care increases the woman's life satisfaction. The effect is most prominent when the partner helps with washing up after meals (odds ratio of 1.62) and laundry (1.52). This suggests that it is the partner's help with household chores, especially the time-invariant ones, that matter most for women's life satisfaction during the lockdown. This result is in line with other studies reported earlier (e.g., Coltrane, 2000; Hook, 2010). Interestingly, in sharp contrast to the results on leisure, we find that few other factors seems to affect life satisfaction as much (odds ratio for additional controls reported in extended Table A5) thus suggesting that the result on partner's help with time-inflexible tasks is indeed a very important determinant of life satisfaction for the woman. By far, this was the most common

theme in the experiences shared by participants, where women whose partners shared household work, especially time-invariant tasks expressed a positive experience (Box 1) and vice versa (Box 2).

Box 1. Positive experiences

- *“It has definitely brought our family together. As a couple we get to spend most of time together, we often cook together and my husband is always there to support me and help me with house hold chores”. (age 27, Content Writer)*
- *“The lockdown experience has made me very appreciative of my spouse who is truly an equal partner in our relationship. We understand each other’s jobs better, its demands, and support each other.” (age 37, Learning and Development Partner)*
- *“I’m actually enjoying the calm. He loves to cook and is finally getting to do that. He even plans for what we’ll be eating, so our mental labour is also divided. Dirt and dust bother me more than it bothers him, so I clean.” (age 32, UI Designer)*
- *“Made us realize we can do so much without any help. My husband made restaurant quality pizzas at home, I’m loving it!” (age 31, ~)*
- *“It amazing to see my husband cooking for me, he has developed interest to cook and support me in chopping etc.” (age 37, Development Professional)*
- *“I never knew my husband will be so understanding about household work and seeing him cooking was a distant dream but I am somewhat happy how we both are managing things and especially help I am getting from him.” (age 33, Insurance Advisor)*
- *“My husband started taking more interest in cooking and all the other household activities like buying groceries, cleaning house.” (age 30, Clinical Data Coordinator)*

Box 2. Negative experiences

- *“No one helped me...no one appreciated the efforts...spouse took advantage of it fully and rested as much as possible” (age 43, Customer Service)*
- *“I would appreciate people to voluntarily help with house work. They need to understand it is very difficult and drains way too much energy by the end of the day” (25, ~)*
- *“I prefer going out to work because now my sole focus is on my husband, baby and household chores and not me...” (age 28, Teacher)*

The only other factors that mattered were lockdown itself and typical commuting time to work. Several of our participants spoke about their positive experience of not having to commute long hours to get to their work places, saving them not only time, but also exposure to pollution and stress of peak time travel. Commuting to work typically meant an hour of travel but for many it was ~2 hours and for some it was as much as 4 hours. Relating some of these experiences our participants said, *“Although work has extensively increased, but we have had good time with family ... which was not possible in normal days due to office and travelling*

which was hectic due to heavy traffic” (age 34, IT Software); “I find lockdown as a boom for me... I am saving on my travel time, as my travel it is approximately 4 hrs a day so I am utilising them in exercising & doing household work.” (age 34, Architect)

Overall, our results on leisure and life-satisfaction indicate that while both men and women enjoyed more rest more during the lockdown, their life-satisfaction reportedly fell, with women experiencing a greater fall. Significantly we find that partner’s help with different chores, especially the time invariant and tedious ones like cooking, washing-up after meals and laundry increases the time women has for rest and recuperation. This is in line with the literature that suggests that burden of time-invariant tasks reduces the well-being of women, and sharing the burden has a positive effect on their well-being. While some work-related factors (commute time, flexibility of contract and partner’s earnings) seem to affect leisure, no other factor seems to improve the woman’s life satisfaction indicating that partner’s willingness to share the burden of chores is the most important determinant of women’s happiness in the context of the lockdown.

Table 7a Ordered logit with dependent variable woman's rest (sleep) (Model 3a)¹

VARIABLES	(1) Odds Ratio	(2) Odds Ratio	(3) Odds Ratio	(4) Odds Ratio	(5) Odds Ratio	(6) Odds Ratio	(7) Odds Ratio	(8) Odds Ratio
Lockdown	1.159 (0.231) ²	1.158 (0.233)	1.210 (0.243)	1.216 (0.245)	1.186 (0.239)	1.243 (0.250)	1.230 (0.248)	1.219 (0.247)
Partner helps cook	1.546*** ³ (0.216)							
Partner helps wash up		1.378** (0.194)						
Partner helps with laundry			1.418*** (0.189)					
Partner helps clean the house				1.153 (0.167)				
Partner helps clean toilet					1.331** (0.175)			
Partner helps with childcare						1.058 (0.156)		
Partner helps with eldercare							1.205 (0.164)	
Partner helps with grocery shopping								1.163 (0.151)
Observations	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049

Notes:

1. Individual and household controls included in all the models. Odds ratio of additional covariates reported in Appendix table A4
2. Robust standard errors in parentheses
3. *** p<0.01, ** p<0.05, * p<0.1

Table 7b. Ordered logit with dependent variable “Own Life Satisfaction” (Model 3b)¹

VARIABLES	(1) Odds Ratio	(2) Odds Ratio	(3) Odds Ratio	(4) Odds Ratio	(5) Odds Ratio	(6) Odds Ratio	(7) Odds Ratio	(8) Odds Ratio
Lockdown	0.243*** ² (0.046) ³	0.227*** (0.045)	0.247*** (0.047)	0.241*** (0.046)	0.250*** (0.047)	0.259*** (0.048)	0.258*** (0.048)	0.260*** (0.048)
Partner helps cook	1.371** (0.177)							
Partner helps wash up		1.621*** (0.228)						
Partner helps with laundry			1.525*** (0.190)					
Partner helps clean the house				1.433*** (0.197)				
Partner helps clean toilet					1.264* (0.156)			
Partner helps with childcare						1.251 (0.185)		
Partner helps with eldercare							1.324** (0.169)	
Partner helps with grocery shopping								1.104 (0.136)
Observations	1,058	1,058	1,058	1,058	1,058	1,058	1,058	1,058

Notes:

1. Dependent variable is ordered in a scale of 1-10. Individual and household controls included in all the models. Odds ratio of additional controls reported in Appendix table A5.
2. Robust standard errors in parentheses
3. *** p<0.01, ** p<0.05, * p<0.1

7. Summary and Concluding Comments

The question of who does what housework among dual-earner couples has been of enduring interest to sociologists because it provides a nuanced insight into the genesis, perpetuation and intergenerational transmission of gender roles. Overall, research in this area shows that despite their increased involvement in paid work, women's association with housework remains sticky. Women in paid work often suffer the consequences of overwork, which has repercussions for their physical and psychological health. Several accept low-paid jobs to be able to juggle paid work and housework, which in turn reinforces their role as homemakers. There are several factors that have enabled women break this vicious circle, for instance education and family wealth. One factor that remains unexplored is whether housework is shared more equally when men are exposed to the struggles that women endure in managing both paid work and home work. And does this translate into better life satisfaction for men and women? The COVID-19 pandemic caused a structural break in the form of a lockdown that forced men and women to work from home. This paper exploits the lockdown phenomenon to examine these questions. The findings of this research have implications for women's work and well-being, but also throw a unique light on what happens at the margins of patriarchy.

Given that controlling for base patriarchy was essential to understand 'real' shifts in housework, we introduce a 'soft patriarchy index' that measures how much partners helped in usual times. Drawing on data collected from 585 women and their spouses who are working from home in urban India during the lockdown period, we find that women's housework burden certainly increased. However, male contribution also increased and this effect was discernable across nearly all the task. This effect was more prominent in households that lost access to external domestic help.

Two results are particularly noteworthy. First, that base level patriarchy matters. Partners who share household in typical times are more likely to help and help more during times of greater

need. This result is robust and holds across nearly all tasks. Second, we find that when working from home, women were more likely to do time-invariant tasks like cooking and washing up alone, while tasks that men were more likely to do alone were easier to control in terms of their scheduling like grocery shopping, which may additionally provide a source of respite from being confined to the house during the lockdown.

Given the correlation drawn in the literature between women's involvement in household chores, especially in time-invariant tasks that are routine and cannot be put off, with their rest and well-being we turn to examine this question next. Our results indicate that both men and women enjoyed significantly more rest during the lockdown but their life-satisfactions suffered, especially for women. Most significantly we find that it is only husband's help with various household chores that matters to women's rest and contributed positively to their happiness. This is especially true for husband's help with time-invariant tasks like cooking and washing up.

For millions of working adults, work from home is here to stay in some shape or form. Perhaps not in the strict way it was imposed in the initial phases of the pandemic, but certainly many have experienced a somewhat more permanent shift in their place of work, typically working more from home. In this context, the findings of our paper suggest that in dual-earner households, both men and women are likely to experience an increase in household chores, especially in the absence of domestic help. But saving on commuting time means they are also likely also enjoy more rest. The fall in life satisfaction across both genders and at least some of this is likely to be a temporary phenomenon associated with being in lockdown. Further, women's life satisfaction was found to be closely linked to whether or not husbands helped with household chores, especially with time-invariant ones. Evidence, however, also suggests that women tend take on more of these tasks when working from home. It is greater sharing of time-invariant household chores with husbands that seems to have emerged as the real divider

between women who are happy and those who aren't. We do see that men who are exposed to women's struggles with dual-burden are willing to share household chores, so it is perhaps better knowledge about what really matters to women's happiness and well-being that needs to reach men. Public messaging can support such an objective, as already seen in other areas like popularizing the use of sanitary pads for better menstrual hygiene.

References

- Agarwal, Bina. 1994. "Conceptualizing Gender Relations." In *A Field of One's Own: Gender and Land Rights in South Asia*, 51-81. Cambridge University Press.
- Aguiar, Mark, and Hurst, Erik. 2007. "Measuring Trends in Leisure: The Allocation of Time Over Five Decades." *The Quarterly Journal of Economics* 122(3): 969–1006.
- Alderman, Harold, Chiappori, Pierre-André., Haddad, Lawrence, Hoddinott, John, and Kanbur, Ravi. 1995. Unitary Versus Collective Models of the Household: Is It Time to Shift the Burden of Proof?" *The World Bank Research Observer* 10(1): 1–19.
- Allmendinger, Jutta. 2020. "Zurück in alte Rollen. Corona bedroht die Geschlechtergerechtigkeit." *WZB Mitteilungen* 168, 45-47.
- Alon, Titan., Doepke, Matthias, Olmstead-Rumsey Jane, and Tertilt, Michèle. 2020. "The Impact of COVID-19 on Gender Equality." *National Bureau of Economic Research Working Paper* 26947.
- Andrew, Alison., Cattan, Sarah., Costa Dias, Monica., Farquharson, Christine., Kraftman, Lucy., Krutikova, Sonya., Phimister, Angus., and Sevilla, Almudena. 2020. "How are Mothers and Fathers Balancing Work and Family under Lockdown?" *The Institute for Fiscal Studies*.
- Baghal, Tarek Al. 2014. "Is Vague Valid? The Comparative Predictive Validity of Vague Quantifiers and Numeric Response Options". *Survey Research Methods* 8 (3): 169-79.
- Barnett, Rosalind C, and Shen, Yu-Chu. 1997. "Gender, High- and Low-Schedule-Control Housework Tasks, and Psychological Distress: A Study of Dual-Earner Couples." *Journal of Family Issues* 18(4): 403–28.
- Baxter, Jonathan. 2000. "A Model of Inductive Bias Learning." *Journal of Artificial Intelligence* 12: 149-198.
- Becker, Gary. 1965. "A Theory of the Allocation of Time." *The Economic Journal* 75(299): 493-517.
- Becker, Gary. 1981 "Altruism in the Family and Selfishness in the Market Place." *Economica* 48(189):1-15.
- Bhandari, Laveesh and Dubey, Amaresh. 2019. "Emerging Employment Patterns of 21st Century India." *Indicus Foundation White Paper* 11.
- Bianchi, Suzanne M, Milkie, Melissa A, Sayer, Liana C, and Robinson, John P. 2000. "Is Anyone Doing the Housework? Trends in the Gender Division of Household Labor." *Social Forces* 79: 191-228.
- Bianchi, Suzanne M, Robinson, John P, and Milke, Melissa A. 2006. "The Changing Rhythms of American Family Life." *Russell Sage Foundation*.
- Bittman, Michael. and Wajcman, Judy. 2000. "The Rush Hour: The Character of Leisure Time and Gender Equity." *Social Forces* 79(1): 165-189.
- Bittman, Michael, England, Paula, Sayer, Liana, Folbre, Nancy, and Matheson, George. 2003. "When Does Gender Trump Money? Bargaining and Time in Household Work." *American Journal of Sociology* 109(1): 186-214.
- Blau, Francine, D, and Lawrence M. Kahn. 2000. "Gender Differences in Pay." *Journal of Economic Perspectives* 14 (4): 75-99.
- Blavatnik School of Government. 2020. "COVID-19 Government Response Tracker." Accessed Oct 23, 2021. <https://www.bsg.ox.ac.uk/research/research-projects/covid-19-government-response-tracker>.
- Böhm, Steffen, and Chris Land. 2012. "The New 'Hidden Abode': Reflections on Value and Labour in the New Economy." *The Sociological Review* 60(2): 217–40
- Brown, Jenny. 2020. "The Hidden Fight over Women's Work." *New Labor Forum* 29(1): 58–66.

- Browning, Martin, and Chiappori Pierre A. 1998. "Efficient Intra-Household Allocations: A General Characterization and Empirical Tests." *Econometrica* 66(6): 1241–78.
- Bruckner, Donald. 2009. "In defense of adaptive preferences." *Philosophical Studies* 142: 307-324.
- Chemaly, Soraya. 2020. "Coronavirus could hurt women the most. Here's how to prevent a patriarchal pandemic." Accessed Oct 22, 2021. <https://www.nbcnews.com/think/opinion/coronavirus-could-hurt-women-most-here-s-how-prevent-patriarchal-ncna1186581>.
- Coltrane, Scott. 2000. "Research on Household Labor: Modeling and Measuring the Social Embeddedness of Routine Family Work." *Journal of Marriage and Family* 62(4): 1208-1233.
- Cordero-Coma, Julia and Esping-Andersen, Gøsta. 2018. "Parental time dedication and children's education. An analysis of West Germany." *Research in Social Stratification and Mobility* 55:1-12.
- Chow, Chin Moi. 2020. "Sleep and Well-being. Now and in the Future". *International Journal of Environment Research and Public Health* 17(8).
- Craig, Lyn. 2006. "Does Father Care Mean Fathers Share? A Comparison of How Mothers and Fathers in Intact Families Spend Time with Children." *Gender & Society* 20(2): 259–281.
- Craig, Lyn. 2007. "How Employed Mothers in Australia Find Time for Both Market Work and Childcare." *Journal of Family and Economic Issues* 26: 69-87.
- Craig, Lyn, and Churchill, Brendan. 2021. "Working and Caring at Home: Gender Differences in the Effects of Covid-19 on Paid and Unpaid Labor in Australia." *Feminist Economics* 27(1-2): 310-326.
- Dasgupta, P. (1993): *An Inquiry into Well-Being and Destitution* (New York: Oxford University Press).
- DeRock, Daniel. 2021. "Hidden in Plain Sight: Unpaid Household Services and the Politics of GDP Measurement." *New Political Economy* 26(1): 20-35.
- De Stefano, Valerio and Aloisi, Antonio. 2021. "Essential Jobs, Remote Work and Digital Surveillance: Addressing the COVID-19 Pandemic Panopticon." *Journal of International Labour Review* Accepted Article.
- Deshpande, Ashwini. 2020. "The Covid-19 Pandemic and Lockdown: First Effects on Gender Gaps in Employment and Domestic Work in India," Working Papers 30, *Ashoka University*
- Doak, Colleen, Bentley, Margaret B., Monterio, Carlos, and Popkin, Barry M. 2005. "The Dual Burden Household and the Nutrition Transition Paradox." *International Journal of Obesity* 29(1): 129–136.
- Elster, Jon. 1982. "Sour Grapes: Utilitarianism and the Genesis of Wants." In *Utilitarianism and Beyond* edited by Amartya Sen and Bernard Williams. 219-238. Cambridge University Press.
- Farré, Lídia, Vella, Francis. 2013. "The Intergenerational Transmission of Gender Role Attitudes and its Implications for Female Labour Force Participation." *Economica* 80(318): 219-247.
- Fenske, James, Gupta, Bishnupriya, and Song, Yuan. 2020. "Demographic Shocks and Women'S Labor Market Participation: Evidence from the 1918 Influenza Pandemic in India." *CEPR Discussion Paper No. DP15077*.
- Folbre, Nancy. 2020. "Manifold Exploitations: Toward an Intersectional Political Economy." *Review of Social Economy*, 78(4): 451-472.
- Folbre, Nancy. 2021. "Developing Care: The Care Economy and Economic Development." In *Women's Economic Empowerment: Insights from Africa and South Asia*, edited by Kate Grantham, Gillian Dowie, Arjan de Haan, 102-125. Routledge.

- Fortin, Nicole M. 2005. "Gender Role Attitudes and the Labour-market Outcomes of Women across OECD Countries." *Oxford Review of Economic Policy* 21(3): 416–438.
- Geist, Claudia. 2005. "The Welfare State and the Home: Regime Differences in the Domestic Division of Labour." *European Sociological Review* 21(1): 23–41.
- Gershuny, Jonathan. 2003. *Changing Times: Work and Leisure in Postindustrial Society*. Oxford University Press
- Gershuny, Jonathan and Bittman, Michael. 2005. "Exit, Voice, and Suffering: Do Couples Adapt to Changing Employment Patterns?" *Journal of Marriage and Family* 67(3): 656–665
- Gershuny, Jonathan. 2012. "Too Many Zeros: A Method for Estimating Long-Term Time-Use from Short Diaries." *Annals of Economics and Statistics* 105/106: 247–270.
- Golding, Claudia. 2014. "A Grand Gender Convergence: Its Last Chapter, *American Economic Review* 104(4): 1091–1119.
- Government of India. 2020. "Time Use in India 2019." *Ministry of Statistics and Programme Implementation*.
- Grigoryeva, Angelina. 2017. "Own Gender, Sibling's Gender, Parent's Gender: The Division of Elderly Parent Care among Adult Children." *American Sociological Review* 82(1): 116–46.
- Haddad, Larence, Hoddinott, John, and Alderman, Harold. 1997. "Intrahousehold Resource Allocation in Developing Countries: Models, Methods and Policies." *International Food Policy Research Institute* 24.
- Hallerod, Bjorn. 2006. "Sour Grapes: Relative Deprivation, Adaptive Preferences and the Measurement of Poverty." *Journal of Social Policy* 35(3): 371–390.
- Hank, Karsten, and Anja Steinbach. 2021. "The Virus Changed Everything, didn't It? Couples' Division of Housework and Childcare before and During the Corona Crisis." *Journal of Family Research* 33(1):99–114.
- Hochschild, Arlie Russell, and Machung, Anne, 1989. "The second shift: working parents and the revolution at home." *N.Y.: Viking*.
- Hoddinott, John. and Haddad, Lawrence.1995. "Does Female Income Share Influence Household Expenditures? Evidence from Côte d'ivoire." *Oxford Bulletin of Economics and Statistics* 57(1): 77–96.
- Hook, Jennifer L. 2010. "Gender inequality in the welfare state: Sex segregation in housework, 1965–2003." *American Journal of Sociology*, 115(5): 1480–1523.
- Hwang, Jisoo, Lee, Chulhee, and Lee, Esther. 2019. "Gender Norms and Housework Time Allocation Among Dual-earner Couples." *Labour Economics* 57, 102–116.
- International Labour Organisation. 2020. "World Employment and Social Outlook: Trend 2020." *International Labour Office-Geneva: ILO*.
- International Monetary Fund. 2020. "Policy Response to COVID-19: India" <https://www.imf.org/en/Topics/imf-and-covid19/Policy-Responses-to-COVID-19#I> <Accessed on 20th October 2021>
- Kabeer, Naila. 2017. "Economic Pathways to Women's Empowerment and Active Citizenship: What Does the Evidence from Bangladesh Tell Us?" *The Journal of Development Studies* 53(5): 649–663.
- Kandiyoti, Deniz. 2005. "Gender, Power and Contestation: Rethinking Bargaining with Patriarchy." In *Feminist Visions of Development: Gender Analysis and Policy*, edited by Cecile Jackson, Ruth Pearson, Routledge, 135–152
- Khader, Serene J. 2011. *Adaptive Preferences and Women's Empowerment*. Oxford University Press.

- Kishore, Sunita and Gupta, Kamla. 2009. "Gender equality and women's empowerment in India: NFHS-3, India, 2005–06". *International Institute for Population Sciences* Calverton, Maryland, USA: ICF Macro.
- Knudsen, Knud. and Wærness, Kari. 2008. "National Context and Spouses' Housework in 34 Countries." *European Sociological Review* 24(1): 97–113.
- Kroska, Amy. 2004. "Divisions of Domestic Work: Revising and Expanding the Theoretical Explanations." *Journal of Family* 25(7): 890–922.
- Lundberg, Shelly. and Pollak, Robert A. 1996. "Bargaining and Distribution in Marriage." *Journal of Economic Perspectives* 10 (4): 139-158.
- Madgavkar, Anu, White, Olivia, Krishnan, Mekala, Mahajan, Deepa, and Azcue, Xavier. 2020. "COVID-19 and Gender Equality: Countering the Regressive Effects." *McKinsey & Company*.
- Manser, Marilyn. and Brown, Murraray. 1980. "Marriage and Household Decision-Making: A Bargaining Analysis." *International Economic Review* 21(1): 31-44.
- Masih, Niha. 2021. "Millions of Indian kids have been out of school for 18 months." *The Washington Post*, Oct 2, 2021
<https://www.washingtonpost.com/world/2021/10/02/coronavirus-india-school-closures/>
 <Accessed on 20 Oct, 2021>
- McElroy, Marjorie B. 1990. "The Empirical Content of Nash-Bargained Household Behavior." *The Journal of Human Resources* 25(4): 559-583.
- McElroy, Marjorie B. and Horney, Mary Jean. 1981. "Nash-Bargained Household Decisions: Toward a Generalization of the Theory of Demand" *International Economic Review* 22(2): 333-349.
- McElroy, Marjorie B. 1997. "The Policy Implication of Family Bargaining and Marriage Markets." In *Intrahousehold Resource Allocation in Developing Countries: Models, Methods, and Policy*, ed. by Lawrence Haddad, John Hoddinott, and Harold Alderman. Baltimore: Johns Hopkins University Press, 1997, 53-74.
- Nussbaum, Martha. 2000. "Women's Capabilities and Social Justice." *Journal of Human Development* 1(2): 219-247.
- Nussbaum, Martha. 2001. "Symposium on Amartya Sen's Philosophy: 5 Adaptive Preferences and Women's Options." *Economic and Philosophy* 17(1): 67-88.
- Ott, Notburga. 1992. "Fertility and Division of Work in the Family: A Game Theoretic Model of Household Decision." In *Out of the Margin: Feminist Perspectives on Economics*, edited by Edith Kuiper, Jolande Sap, and Susan Feiner, 80-100. Routledge.
- Pandey, Geeta. 2020. "Coronavirus in India: Did men do more housework during lockdown?" Accessed Oct 22, 2021. <https://www.bbc.co.uk/news/world-asia-india-53750633>.
- Patterson, Joan M. 2002. "Understanding Family Resilience." *Journal of Clinical Psychology* 58(3): 233-246.
- Pollmann-Schult, Matthias. 2015. "Familie, Erwerbsarbeit, Einkommen." In: *Handbuch Familiensoziologie* edited by Paul Hill and Johannes Kopp, 613-639. Springer VS.
- Posel, Dorrit. and Casale, Daniela. 2020. "Gender and the Early Effects of the COVID-19 Crisis in the Paid and Unpaid Economies in South Africa." *National Income Dynamics Study*.
- Rao, Smriti. 2018. "Gender and Class Relations in Rural India." *The Journal of Peasant Studies* 45(5-6): 950-968.
- Rukmini, S. 2020. "India has one of the world's strictest lockdowns: Why are cases still rising?" *Guardian*, 4 July, 2020.
<https://www.theguardian.com/commentisfree/2020/jul/04/india-lockdowns-cases-rising->
 <Accessed on 20th October, 2021>
- Sayer, Andrew. 2005. "Class, Moral Worth and Recognition." *Sociology* 39(5): 947–963.
- Sen, Amartya. 1984. "The Living Standard." *Oxford Economic Paper* 36: 74-90.

- Sen, Amartya. 1990. "Rational Behaviour." In *Utility and Probability*, edited by John Eatwell, Murray Milgate and Peter Newman. 198-216. The New Palgrave.
- Sen, Amartya. 1999. "Commodities and Capabilities." *Oxford University Press*.
- Sen, Amartya. 1999. "On Ethics and Economics." *Oxford University Press*.
- Shockley, Kristen M, and Allen, Tammy D. 2012. "Motives for Flexible Work Arrangement Use." *Community, Work & Family* 15(2): 217-231.
- Stier, Haya. and Lewin-Epstein, Noah. 2007. "Policy Effects on the Division of Housework." *Journal of Comparative Policy Analysis: Research and Practice* 9(3): 235-259.
- Sullivan, Oriel. 2000. "The Division of Domestic Labour: Twenty Years of Change?" *Sociology* 34 (3): 437-56.
- Teschl, Miriam. and Comim, Flavio. 2005. "Adaptive Preferences and Capabilities: Some Preliminary Conceptual Explorations." *Review of Social Economy* 63(2): 229-247.
- Thomas, Duncan. 1990. "Intra-Household Resource Allocation: An Inferential Approach." *The Journal of Human Resources*. " 25(4): 635-664.
- Thompson, Rebecca J., Payne, Stephanie C., Taylor, Aaron B. 2015. "Applicant Attraction to Flexible Work Arrangements: Separating the Influence of Flextime and Flexplace." *Journal of Occupational and Organizational Psychology* 88(4): 726-749.
- The Economist. 2021. "Many hands, light work: Only 7% of urban Indian women have paid jobs." 18th Feb, 2021. <https://www.economist.com/leaders/2021/02/20/only-7-of-urban-indian-women-have-paid-jobs> <Accessed on 20th Oct, 2021>
- The Economist. 2021. "Remotely learning: India's pupils have been hard hit by extended school closures." 18th Sept, 2021. <https://www.economist.com/asia/2021/09/18/indias-pupils-have-been-hard-hit-by-extended-school-closures> <Accessed on 20th Oct, 2021>

Appendix

Table A1. OLS model with dependent variables Difference in Index of housework done by woman alone and with partner's help

VARIABLES	(1) Difference in index of woman doing housework alone	(2) Difference in index of woman doing housework alone	(3) Difference in index of partner helping	(4) Difference in index of partner helping
Lost Domestic Help during lockdown ¹	0.068*** ² (0.022)		0.169*** (0.024)	
No change in domestic help		-0.110*** (0.019)		-0.162*** (0.020)
Soft patriarchy index	-0.196*** (0.046)	-0.062** (0.031)		
Age	0.001 (0.001)	0.001 (0.001)	0.000 (0.001)	0.000 (0.001)
Hindu	0.018 (0.024)	0.014 (0.025)	-0.012 (0.033)	0.005 (0.028)
Number of bedrooms	-0.017 (0.014)	-0.015 (0.012)	0.010 (0.016)	0.022* (0.013)
Household size	-0.002 (0.008)	0.002 (0.008)	-0.010 (0.007)	-0.013** (0.007)
Boys below 16	0.052** (0.021)	0.035* (0.019)	-0.062*** (0.018)	-0.043*** (0.015)
Girls Below 16	0.014 (0.020)	-0.014 (0.021)	0.014 (0.021)	0.024 (0.018)
Usual commute time	0.017* (0.010)	0.009 (0.007)	-0.003 (0.009)	-0.002 (0.007)
Partner's usual commute time	-0.007 (0.010)	-0.012 (0.008)	0.006 (0.010)	0.010 (0.007)
Own earnings category	-0.005 (0.028)	0.004 (0.023)	0.043 (0.027)	0.023 (0.023)
Partner's earnings category	0.057* (0.033)	0.048* (0.025)	-0.040 (0.031)	-0.046* (0.025)
Full time	-0.046 (0.029)	-0.030 (0.024)	0.009 (0.032)	-0.004 (0.024)
Own flexible work during lockdown	-0.082*** (0.024)	-0.054*** (0.020)	0.044 (0.028)	0.023 (0.022)
Partner's flexible work during lockdown	0.038 (0.028)	0.038* (0.022)	-0.010 (0.031)	0.000 (0.025)
Husband lost work during pandemic	0.030 (0.037)	0.014 (0.032)	0.012 (0.037)	-0.009 (0.029)
East Region	-0.163* (0.037)	-0.138 (0.032)	0.099 (0.037)	0.014 (0.029)

	(0.097)	(0.087)	(0.151)	(0.149)
North Region	-0.026	-0.031	-0.028	-0.044
	(0.063)	(0.052)	(0.125)	(0.126)
South Region	-0.037	-0.057	-0.038	-0.018
	(0.065)	(0.054)	(0.127)	(0.128)
West Region	-0.050	-0.042	0.005	0.010
	(0.062)	(0.052)	(0.124)	(0.126)
Constant	0.049	0.116	0.028	0.181
	(0.088)	(0.076)	(0.142)	(0.136)
Observations	378	523	378	523
R-squared	0.132	0.128	0.139	0.152

1. The variable “Lost Domestic Help during lockdown” takes value 1 if the household usually has domestic help but not during lockdown and 0 if household has domestic help both before and during lockdown. The variable “No change in domestic help” takes value 1 if household didn’t have help before or during lockdown or the household had help both before and during lockdown and 0 if the household had help before lockdown and didn’t have help during lockdown.
2. Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table A2 Multinomial logit model with dependent variable: Who does housework. Base category: Woman alone (Marginal Effects)

VARIABLES	(1) Cooks	(2) Does Washing up	(3) Does Laundry	(4) Cleans the house	(5) Cleans toilets	(6) Childcare	(7) Eldercare	(8) Grocery Shopping
Panel 1: Category: Partner helps								
Lockdown	0.159*** ¹ (0.044)	0.250*** (0.042)	0.119*** (0.044)	0.162*** (0.044)	0.234*** (0.050)	0.095 (0.000)	0.100 (0.063)	0.193*** (0.052)
Soft Patriarchy Index	0.586*** (0.045)	0.623*** (0.038)	0.829*** (0.053)	0.675*** (0.050)	0.856*** (0.059)	1.260 (0.000)	1.004*** (0.096)	0.723*** (0.090)
Age	-0.011*** (0.002)	-0.009*** (0.002)	-0.008*** (0.002)	-0.008*** (0.002)	-0.003 (0.002)	0.003 (0.000)	-0.007*** (0.003)	-0.001 (0.002)
Hindu	-0.119*** (0.031)	-0.022 (0.035)	0.051 (0.039)	-0.094*** (0.033)	0.050 (0.038)	0.010 (0.000)	-0.011 (0.059)	-0.023 (0.042)
Number of bedrooms	0.019 (0.018)	0.010 (0.017)	-0.003 (0.020)	0.028 (0.018)	0.013 (0.018)	-0.001 (0.000)	-0.004 (0.024)	0.002 (0.020)
Household size	-0.032*** (0.010)	-0.035*** (0.011)	-0.038*** (0.012)	-0.023** (0.010)	-0.040*** (0.011)	0.030 (0.000)	-0.004 (0.015)	-0.021* (0.013)
Boys below 16	0.015 (0.024)	-0.005 (0.028)	0.005 (0.029)	-0.016 (0.026)	-0.004 (0.026)	0.009 (0.000)	-0.011 (0.032)	0.025 (0.034)
Girls Below 16	0.038* (0.020)	0.030 (0.023)	-0.006 (0.027)	0.021 (0.023)	0.033 (0.026)	0.006 (0.000)	-0.032 (0.026)	0.047 (0.029)
Usual commute time	-0.010 (0.017)	-0.015 (0.016)	0.005 (0.014)	-0.023 (0.015)	0.001 (0.016)	-0.012 (0.000)	-0.019 (0.019)	-0.024 (0.015)
Partner's usual commute time	0.001 (0.018)	0.010 (0.016)	-0.014 (0.016)	-0.019 (0.015)	0.017 (0.016)	0.000 (0.000)	0.017 (0.020)	0.033** (0.016)
Own earnings category	0.034* (0.019)	0.042** (0.018)	0.031 (0.019)	-0.034* (0.019)	0.011 (0.020)	0.037 (0.000)	0.079*** (0.025)	0.036* (0.020)
Partner's earnings category	-0.015 (0.017)	-0.022 (0.017)	-0.026 (0.017)	-0.001 (0.017)	-0.019 (0.018)	-0.031 (0.000)	-0.065*** (0.024)	-0.018 (0.020)
Full time	-0.011	-0.064*	-0.005	0.051	0.005	-0.024	-0.027	-0.001

	(0.034)	(0.034)	(0.035)	(0.035)	(0.034)	(0.000)	(0.049)	(0.041)
Own flexible work during lockdown	-0.017	-0.003	0.042	0.037	0.076**	-0.063	-0.002	0.021
	(0.031)	(0.028)	(0.029)	(0.030)	(0.030)	(0.000)	(0.046)	(0.035)
Partner's flexible work during lockdown	-0.021	-0.024	-0.086***	-0.009	-0.014	-0.045	-0.035	0.007
	(0.032)	(0.031)	(0.031)	(0.030)	(0.032)	(0.000)	(0.047)	(0.037)
Individual's base housework	-0.049	-0.199***	-0.336***	-0.223***	-0.294***	0.002	-0.010	-0.089*
	(0.046)	(0.044)	(0.053)	(0.053)	(0.052)	(0.000)	(0.066)	(0.054)
Husband works	0.005	0.012	-0.112**	0.035	0.046	0.105	-0.029	0.099*
	(0.050)	(0.046)	(0.048)	(0.048)	(0.046)	(0.000)	(0.070)	(0.054)
East Region	0.392***	-0.462***	-0.322	-0.009	0.146	-0.380	-0.208	-0.337*
	(0.118)	(0.149)	(0.213)	(0.173)	(0.214)	(0.000)	(0.352)	(0.199)
North Region	0.249***	-0.345***	-0.183	0.010	0.072	-0.463	-0.194	-0.333***
	(0.020)	(0.104)	(0.189)	(0.105)	(0.159)	(0.000)	(0.183)	(0.023)
South Region	0.276***	-0.278**	-0.252	-0.005	0.091	-0.470	-0.238	-0.329***
	(0.040)	(0.109)	(0.193)	(0.110)	(0.166)	(0.000)	(0.191)	(0.054)
West Region	0.247***	-0.312***	-0.197	0.020	0.064	-0.444	-0.215	-0.398***
	(0.021)	(0.110)	(0.188)	(0.103)	(0.158)	(0.000)	(0.182)	(0.025)

Panel 2: Category: Others help

Lockdown	-0.263***	-0.409***	-0.210***	-0.350***	-0.331***	-0.077	-0.127**	-0.064*
	(0.045)	(0.035)	(0.045)	(0.042)	(0.041)	(0.000)	(0.050)	(0.037)
Soft Patriarchy Index	-0.031	-0.117*	-0.141**	-0.113*	-0.346***	-0.188	0.148*	-0.165***
	(0.070)	(0.063)	(0.071)	(0.066)	(0.080)	(0.000)	(0.082)	(0.063)
Age	0.006***	0.011***	0.010***	0.011***	0.008***	-0.006	0.009***	0.003**
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.000)	(0.002)	(0.001)
Hindu	0.035	0.005	0.035	0.038	-0.028	0.030	0.071	-0.002
	(0.039)	(0.039)	(0.039)	(0.040)	(0.034)	(0.000)	(0.049)	(0.030)
Number of bedrooms	0.002	0.018	0.016	0.039*	0.012	0.047	0.013	0.005
	(0.019)	(0.019)	(0.019)	(0.020)	(0.017)	(0.000)	(0.022)	(0.012)
Household size	0.054***	0.053***	0.079***	0.040***	0.059***	-0.015	0.026**	0.043***

	(0.013)	(0.011)	(0.013)	(0.013)	(0.012)	(0.000)	(0.011)	(0.011)
Boys below 16	-0.005	-0.032	-0.051	-0.014	-0.037	0.023	0.043*	-0.044
	(0.039)	(0.027)	(0.039)	(0.032)	(0.035)	(0.000)	(0.025)	(0.043)
Girls Below 16	-0.040	-0.032	-0.047	-0.002	-0.030	-0.008	-0.019	-0.054
	(0.031)	(0.024)	(0.032)	(0.028)	(0.028)	(0.000)	(0.021)	(0.035)
Usual commute time	0.024*	0.005	-0.010	0.003	0.020	0.021	0.003	0.009
	(0.014)	(0.013)	(0.013)	(0.014)	(0.012)	(0.000)	(0.014)	(0.010)
Partner's usual commute time	-0.012	-0.003	0.003	0.016	-0.025*	0.003	-0.025	-0.008
	(0.015)	(0.013)	(0.014)	(0.014)	(0.013)	(0.000)	(0.015)	(0.011)
Own earnings category	0.015	0.011	-0.002	0.043**	0.038**	-0.009	-0.070***	-0.033**
	(0.021)	(0.020)	(0.019)	(0.020)	(0.019)	(0.000)	(0.023)	(0.014)
Partner's earnings category	0.062***	0.044**	0.030*	0.024	0.043**	0.017	0.052**	0.012
	(0.019)	(0.018)	(0.018)	(0.019)	(0.018)	(0.000)	(0.020)	(0.015)
Full time	0.016	0.003	0.038	-0.029	-0.010	0.043	0.037	0.029
	(0.039)	(0.036)	(0.038)	(0.038)	(0.036)	(0.000)	(0.041)	(0.029)
Own flexible work during lockdown	0.044	0.021	-0.045	-0.028	-0.038	0.052	0.007	-0.016
	(0.032)	(0.031)	(0.031)	(0.032)	(0.030)	(0.000)	(0.039)	(0.023)
Partner's flexible work during lockdown	0.025	0.028	0.073**	0.009	0.058*	0.019	-0.002	0.037
	(0.033)	(0.032)	(0.031)	(0.033)	(0.031)	(0.000)	(0.042)	(0.023)
Individual's base housework	-0.163***	-0.234***	-0.158***	-0.196***	-0.135***	-0.187	-0.193***	-0.051
	(0.053)	(0.051)	(0.050)	(0.052)	(0.048)	(0.000)	(0.071)	(0.040)
Husband works	-0.045	-0.030	0.121**	-0.042	0.015	-0.026	0.039	-0.023
	(0.056)	(0.052)	(0.053)	(0.056)	(0.052)	(0.000)	(0.062)	(0.034)
East Region	0.009	0.274*	-0.219	-0.416**	0.289	0.380	-0.257	0.337*
	(0.240)	(0.156)	(0.267)	(0.205)	(0.189)	(0.000)	(0.178)	(0.199)
North Region	-0.059	0.053	-0.224	-0.279***	-0.008	0.120	-0.116	0.107***
	(0.161)	(0.106)	(0.189)	(0.104)	(0.124)	(0.000)	(0.180)	(0.015)
South Region	-0.077	-0.044	-0.192	-0.315***	0.024	0.086	-0.018	0.126***
	(0.166)	(0.113)	(0.194)	(0.113)	(0.129)	(0.000)	(0.191)	(0.039)
West Region	-0.016	0.045	-0.168	-0.275***	0.055	0.138	-0.070	0.122***

	(0.160)	(0.111)	(0.188)	(0.103)	(0.123)	(0.000)	(0.180)	(0.015)
Observations	859	859	859	859	859	491	488	859

1. Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

TableA3: Multinomial logit model with dependent variable: Who does housework. Base category: Woman alone (Marginal Effects)¹

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Cooks	Does Washing up	Does Laundry	Cleans the house	Cleans toilets	Childcare	Eldercare	Grocery Shopping
Panel 1: Category: Partner helps								
Lockdown	0.173*** ³ (0.048)	0.243*** (0.047)	0.131*** (0.048)	0.163*** (0.049)	0.250*** (0.053)	0.100 (0.000)	0.114 (0.072)	0.200*** (0.053)
Index of soft patriarchy excluding chore at hand ²	0.502*** (0.056)	0.522*** (0.055)	0.738*** (0.058)	0.574*** (0.057)	0.693*** (0.062)	1.173 (0.000)	0.783*** (0.107)	0.612*** (0.090)
Panel 2: Category: Others help								
Lockdown	-0.266*** (0.045)	-0.407*** (0.036)	-0.211*** (0.046)	-0.347*** (0.043)	-0.333*** (0.042)	-0.077 (0.000)	-0.128** (0.052)	-0.065* (0.038)
Index of soft patriarchy excluding chore at hand	-0.065 (0.077)	-0.024 (0.071)	-0.104 (0.077)	-0.098 (0.075)	-0.270*** (0.078)	-0.184 (0.000)	0.110 (0.081)	-0.141** (0.064)
Observations	859	859	859	859	859	491	488	859

1. All the regressions in the above table includes the following individual and partner controls: Age, Hindu, Number of bedrooms, Household size, Boys below 16, Girls Below 16, Usual commute time, Partner's usual commute time, Own Earnings, Partner's Earnings , Fulltime, Flexible work during lockdown, Partner's flexible work during Lockdown and Regional dummies, whether or not the partner works.
2. The variable 'Index of soft patriarchy excluding chore at hand' is the PCA index generated from the chores where husband helps in the usual period excluding the chore at hand.
3. Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1.

Table A4: Ordered logit with dependent variable "Rest enjoyed by women"

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Lockdown	1.159 (0.231)	1.158 (0.233)	1.210 (0.243)	1.216 (0.245)	1.186 (0.239)	1.243 (0.250)	1.230 (0.248)	1.219 (0.247)
Husband helps cook	1.546* **1 (0.216)							
Husband helps wash up		1.378* * (0.194)						
Husband helps with laundry			1.418* ** (0.189)					
Husband helps clean the house				1.153 (0.167)				
Husband helps clean toilet					1.331* * (0.175)			
Husband helps with childcare						1.058 (0.156)		
Husband helps with eldercare							1.205 (0.164)	
Husband helps with grocery shopping								1.163 (0.151)
Age	0.990 (0.008)	0.989 (0.008)	0.989 (0.008)	0.988 (0.008)	0.988 (0.008)	0.988 (0.008)	0.987* (0.008)	0.988 (0.008)
Hindu	0.922 (0.143)	0.899 (0.139)	0.879 (0.136)	0.897 (0.138)	0.875 (0.136)	0.891 (0.137)	0.882 (0.136)	0.893 (0.137)
Number of bedrooms	1.001 (0.080)	1.014 (0.082)	1.011 (0.081)	1.012 (0.081)	1.003 (0.081)	1.012 (0.081)	1.004 (0.080)	1.006 (0.081)
Household size	1.049 (0.050)	1.043 (0.050)	1.045 (0.050)	1.031 (0.049)	1.046 (0.051)	1.024 (0.049)	1.018 (0.048)	1.034 (0.050)
Boys below 16	0.892 (0.093)	0.883 (0.092)	0.891 (0.093)	0.891 (0.093)	0.887 (0.092)	0.884 (0.096)	0.876 (0.093)	0.886 (0.093)
Girls Below 16	0.948 (0.090)	0.958 (0.091)	0.967 (0.092)	0.956 (0.090)	0.947 (0.090)	0.953 (0.090)	0.965 (0.092)	0.952 (0.091)
Usual commute time	0.922 (0.057)	0.929 (0.057)	0.924 (0.057)	0.926 (0.057)	0.923 (0.056)	0.924 (0.056)	0.921 (0.057)	0.927 (0.057)
Partner's usual commute time	0.956 (0.057)	0.960 (0.057)	0.962 (0.058)	0.962 (0.057)	0.958 (0.057)	0.958 (0.057)	0.958 (0.057)	0.954 (0.057)
Own earnings category	0.991 (0.081)	0.990 (0.081)	0.991 (0.081)	1.014 (0.082)	1.001 (0.082)	1.011 (0.082)	1.008 (0.082)	1.006 (0.082)
Partner's earnings category	1.177* (0.100)	1.170* (0.099)	1.184* * (0.101)	1.165* * (0.098)	1.173* (0.100)	1.161* (0.098)	1.167* (0.099)	1.165* (0.098)
Full time	0.720* (0.122)	0.734* (0.124)	0.720* (0.121)	0.716* * (0.120)	0.720* (0.121)	0.718* * (0.121)	0.722* (0.122)	0.718* * (0.121)
Own flexible work during lockdown	1.485* **	1.507* **	1.480* **	1.484* **	1.469* **	1.479* **	1.488* **	1.482* **

	(0.207)	(0.212)	(0.207)	(0.207)	(0.206)	(0.206)	(0.208)	(0.207)
Partner's flexible work during lockdown	1.044	1.030	1.064	1.025	1.048	1.025	1.033	1.026
	(0.157)	(0.154)	(0.160)	(0.153)	(0.158)	(0.154)	(0.156)	(0.153)
Individual's base housework	0.697*	0.745	0.771	0.787	0.777	0.789	0.750	0.786
	(0.152)	(0.161)	(0.163)	(0.167)	(0.165)	(0.174)	(0.164)	(0.167)
Husband works	0.536*	0.528*	0.553*	0.542*	0.531*	0.545*	0.547*	0.541*
	**	**	**	**	**	**	**	**
East Region	(0.121)	(0.119)	(0.123)	(0.121)	(0.120)	(0.122)	(0.122)	(0.121)
	1.274	1.608	1.490	1.549	1.266	1.576	1.623	1.561
	(1.207)	(1.578)	(1.353)	(1.476)	(1.223)	(1.472)	(1.539)	(1.478)
North Region	1.372	1.512	1.459	1.394	1.296	1.441	1.480	1.421
	(0.442)	(0.526)	(0.507)	(0.503)	(0.466)	(0.516)	(0.506)	(0.492)
South Region	1.193	1.283	1.289	1.214	1.123	1.255	1.289	1.232
	(0.421)	(0.483)	(0.486)	(0.472)	(0.436)	(0.483)	(0.479)	(0.463)
West Region	1.081	1.199	1.175	1.111	1.038	1.146	1.172	1.139
	(0.348)	(0.416)	(0.408)	(0.399)	(0.371)	(0.412)	(0.399)	(0.393)
Observations	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049

1. Robust standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table A5: Ordered logit with dependent variable "Own Life Satisfaction"

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio	Odds Ratio
Lockdown	0.243*** ¹ (0.046)	0.227*** (0.045)	0.247*** (0.047)	0.241*** (0.046)	0.250*** (0.047)	0.259*** (0.048)	0.258*** (0.048)	0.260*** (0.048)
Husband helps cook	1.371** (0.177)							
Husband helps wash up		1.621*** (0.228)						
Husband helps with laundry			1.525*** (0.190)					
Husband helps clean the house				1.433*** (0.197)				
Husband helps clean toilet					1.264* (0.156)			
Husband helps with childcare						1.251 (0.185)		
Husband helps with eldercare							1.324** (0.169)	
Husband helps with grocery shopping								1.104 (0.136)
Age	1.006 (0.007)	1.007 (0.007)	1.006 (0.007)	1.005 (0.007)	1.004 (0.007)	1.003 (0.008)	1.003 (0.007)	1.005 (0.007)
Hindu	0.831 (0.127)	0.822 (0.124)	0.804 (0.122)	0.820 (0.124)	0.795 (0.120)	0.798 (0.119)	0.789 (0.119)	0.807 (0.121)
Number of bedrooms	1.032 (0.076)	1.044 (0.077)	1.032 (0.078)	1.041 (0.077)	1.031 (0.077)	1.046 (0.077)	1.033 (0.077)	1.037 (0.077)
Household size	0.980 (0.042)	0.989 (0.042)	0.986 (0.041)	0.977 (0.041)	0.979 (0.042)	0.955 (0.040)	0.953 (0.040)	0.969 (0.041)
Boys below 16	1.026 (0.131)	1.010 (0.132)	1.029 (0.132)	1.028 (0.133)	1.027 (0.132)	0.999 (0.133)	1.004 (0.131)	1.024 (0.132)
Girls Below 16	1.052 (0.115)	1.054 (0.117)	1.070 (0.119)	1.055 (0.118)	1.046 (0.117)	1.032 (0.120)	1.058 (0.119)	1.047 (0.117)
Usual commute time	0.903* (0.053)	0.913 (0.053)	0.902* (0.052)	0.910 (0.052)	0.907* (0.053)	0.911 (0.053)	0.905* (0.053)	0.909 (0.053)
Partner's usual commute time	0.953 (0.058)	0.954 (0.057)	0.959 (0.057)	0.962 (0.057)	0.955 (0.057)	0.955 (0.058)	0.957 (0.058)	0.956 (0.058)
Own earnings category	1.071 (0.082)	1.059 (0.082)	1.059 (0.081)	1.086 (0.083)	1.076 (0.082)	1.082 (0.082)	1.079 (0.082)	1.082 (0.082)
Partner's earnings category	0.974 (0.075)	0.967 (0.075)	0.987 (0.076)	0.974 (0.075)	0.977 (0.074)	0.966 (0.074)	0.974 (0.074)	0.970 (0.073)
Full time	0.906 (0.149)	0.926 (0.153)	0.905 (0.149)	0.895 (0.147)	0.897 (0.147)	0.901 (0.147)	0.901 (0.147)	0.895 (0.147)
Own flexible work during lockdown	1.048 (0.139)	1.068 (0.141)	1.049 (0.139)	1.052 (0.139)	1.045 (0.138)	1.054 (0.139)	1.057 (0.140)	1.047 (0.139)

Partner's flexible work during lockdown	0.998 (0.139)	0.987 (0.136)	1.023 (0.141)	0.995 (0.137)	1.002 (0.139)	0.997 (0.138)	1.000 (0.139)	0.987 (0.136)
Individual's base housework	1.256 (0.258)	1.252 (0.258)	1.314 (0.267)	1.296 (0.265)	1.332 (0.272)	1.253 (0.268)	1.230 (0.259)	1.351 (0.278)
Husband works	0.887 (0.186)	0.837 (0.177)	0.902 (0.187)	0.859 (0.179)	0.870 (0.180)	0.873 (0.181)	0.884 (0.185)	0.879 (0.182)
East Region	2.930 (2.128)	3.611* (2.775)	3.083 (2.218)	3.317 (2.457)	2.833 (2.044)	3.548* (2.521)	3.557* (2.496)	3.314* (2.392)
North Region	1.371 (0.451)	1.531 (0.534)	1.442 (0.497)	1.352 (0.476)	1.303 (0.433)	1.580 (0.547)	1.503 (0.484)	1.385 (0.458)
South Region	1.289 (0.457)	1.384 (0.515)	1.367 (0.504)	1.256 (0.473)	1.213 (0.437)	1.469 (0.539)	1.398 (0.485)	1.299 (0.464)
West Region	1.196 (0.399)	1.343 (0.474)	1.270 (0.444)	1.191 (0.425)	1.146 (0.387)	1.390 (0.485)	1.309 (0.427)	1.225 (0.412)
Observations	1,058	1,058	1,058	1,058	1,058	1,058	1,058	1,058

1. Robust standard errors in parentheses *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$