Forced to Work from Home: Division of Unpaid Work between Parents and the Relation to Job Satisfaction

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Abstract: This study investigates the division of household chores and caregiving tasks during the COVID-19 pandemic, considering the influence of participants’ sex, work arrangement, and parental status. Additionally, it aims to understand the relationship of these variables with job satisfaction. Specifically, this study analyses the role of participants’ sex and parental status in the increase and division of unpaid work and investigates the roles of sex, work arrangements (namely telework and on-site work), and the division of unpaid work in job satisfaction. These variables were measured and analyzed with a sample of 268 workers in Portugal (57.8% of whom were teleworking) during pandemic lockdowns. Taken together, the results suggest that despite pre-pandemic advances in gender equality and despite men and women perceiving an increase in their domestic workload during lockdowns, there were significant inequalities between men and women in the division of unpaid work. These were intensified for couples with young children and were not mitigated by changes in work arrangements such as telework. For women, the lack of sharing in caregiving tasks while teleworking decreased their job satisfaction. For them, the lack of sharing of caregiving tasks moderates the relationship between work arrangements and job satisfaction. The same was not true for men. Despite the optimistic view that telework might promote a more equal sharing of unpaid work, this study shows that unpaid work is still mostly performed by women, with important consequences for the paid work sphere.

Keywords: COVID-19 pandemic; division of unpaid work; gender inequality; parental status; work arrangements; job satisfaction

1. Introduction

Despite advances towards gender equality made during the last century, issues underlying gender equality persist in Western society (Santos et al. 2021). Women spend about two more hours per day on unpaid work than men, on average, according to the Organisation for Economic Co-operation and Development (2020). Furthermore, women and men tend to participate differently in tasks, which remains an obstacle to gender equality (Perista 2002; Kan et al. 2011).

Unpaid work involves household management tasks and caring for others, such as children, and remains largely feminized (Perista 2002; Wall et al. 2016). While women balance their work and family lives and are responsible for most domestic tasks (Santos et al. 2021), male involvement in unpaid work rarely achieves gender balance. Consequently, the realm of family life perpetuates a context of inequality (Perista et al. 2016), particularly concerning women’s allocation of time, their opportunities for professional advancement, and their personal fulfillment through activities like hobbies and socialization. Living as a couple, particularly in the context of parenthood and home ownership, amplifies the domestic workload (Cunningham 2001; South and Spitze 1994). However, the impact of
cohabitation differs for women and men (Bianchi et al. 2000; Gupta 1999; Aboim et al. 2010). For instance, in marital or de facto unions, men tend to decrease their involvement in domestic tasks, whereas women increase their domestic contributions compared with a state of singleness (Gupta 1999). A study by Mannino and Deutsch (2007) revealed that women continue to bear the primary responsibility for caregiving and household chores, compared to their partners, with husbands spending an average of over 20 h per week on domestic tasks, while their wives dedicate 34 h per week to similar responsibilities (Bartley et al. 2005).

Parenthood triggers a series of responsibilities and workload, primarily impacting mothers, who shoulder most daily tasks associated with childcare (Torres et al. 2011). With the birth of the first child, mothers experience an increase of approximately six additional hours of work per week, while fathers’ domestic time does not suffer as significantly (Baxter et al. 2008). Notably, in France and Italy, mothers perform about 65% of childcare, and having children adds 11 h of domestic work for women compared to seven hours for men (Pailhé et al. 2019; Russell et al. 2019).

The COVID-19 pandemic has blurred the temporal and spatial boundaries between paid and unpaid work due to physical distancing measures and quarantine protocols, leading to a significant increase in the prevalence of telework (Craig 2020; Craig and Churchill 2020). This shift in work arrangements has resulted in a significant increase in the amount of time individuals spend at home, presenting a potential opportunity for a more equitable division of unpaid work (Carlson et al. 2022; Dunatchik et al. 2021). However, this transformation in the family and professional paradigm may also exacerbate pre-existing inequalities, potentially negatively impacting women’s paid work (Dunatchik et al. 2021).

Considering these imbalances, this study aims to understand the division of unpaid work tasks among women and men who were living with a member of the opposite sex as a couple during the pandemic in Portugal, the impact of division of unpaid work on individuals’ satisfaction with paid work, and the influence of marital status and the presence of children on the division of unpaid work. Previous research on the impacts of COVID-19 has covered various aspects with respect to this subject but essentially focusing on very specific groups, such as only teleworking individuals (e.g., Andrade and Lousã 2021) or only mothers (e.g., Madörin and Jacinto 2023; Seedat and Rondon 2021); considering only parental status (e.g., Lu and Zhuang 2023); or focusing only on the paid work sphere (e.g., Sousa-Uva et al. 2021). Others focused on different analytic strategies (e.g., Durante et al. 2022). To address these gaps, our study seeks to examine imbalances by comparing women and men in different constellations (e.g., work arrangements, parental status) encompassing both paid and unpaid work within a unified framework.

Lockdowns during the pandemic presented unique circumstances for families but also facilitated the expansion of non-compulsory teleworking opportunities in the post-pandemic era. This shift holds the potential for improved work–life balance and hybrid solutions, allowing workers to choose the proportion of paid work performed on site or through telework (Laß et al. 2023). Therefore, an important aim of this study is to draw lessons from the experiences during the lockdowns that can be used to inform future scenarios where telework may be seen as an opportunity or a challenge. In doing so, we adopt a framework that considers the uses of time rather than traditional dichotomies between work and family/life domains found in the work–life balance/conflict literature (Orellana et al. 2023). Specifically, we conceptualize domestic life as work, with its own economic and societal contributions, which have been estimated to surpass certain paid work services (Madörin 2010). This approach allows for a distinction between paid work (activities universally recognized as work) and unpaid work (tasks that could be outsourced and remunerated but are instead performed within the family unit, such as housework, caregiving, and attending to the needs of children and other dependents).
2. Literature Review

2.1. COVID-19, Work Arrangements and Gender Inequality in Unpaid Work

Prior to the COVID-19 pandemic, telework was relatively uncommon (International Labour Organization (ILO) (2021)), and the reasons motivating women and men to prefer telework models differed. For women, motherhood tended to be the primary factor, as they valued the increased flexibility in managing their time and the ability to fulfill both professional and family obligations (Casaca 2020; Mokhtarian et al. 1998). Conversely, men tended to emphasize the advantages of increased task focus, greater efficiency, and enhanced productivity associated with telework (Casaca 2020). This discrepancy may explain why telework is often considered more beneficial for women, as it helps them better reconcile their paid and unpaid work responsibilities (Charalampous et al. 2019; Nakrošienė et al. 2019). Conversely, men express greater concern about the potential for work–family conflicts arising from telework (Baert et al. 2020). The reasons for these preferences can be deeply rooted in generalized and internalized perceptions about what it means to be a man or a woman, which have been subject to theoretical proposals in different fields of study.

First, we analyze men and women in gendered terms while acknowledging that gender is a multifaceted construct that extends beyond the biological understanding of sex, and the adopted duality should be understood within the context of a heterosexual relationship between two individuals forming a couple. Understanding gender as a social construction that permeates human interactions was proposed by West and Zimmerman (1987) as “doing gender”, which translates into behaviors being assessed as a function of how they conform with social expectations. If it is more socially acceptable as a feminine performance to prefer work arrangements that facilitate housework, this is what women will prefer. From an economic perspective (Becker 1985), it is strategic for women who combine paid work with childcare and housework to opt for less energy-demanding and more convenient jobs, with many teleworking jobs meeting such criteria. Our research takes on social role theory (Eagly and Wood 2012) to explain gendered preferences for paid and unpaid work. Gender stereotypes derive from the interaction between biological characteristics and culture and can be organized in two dimensions: agency/competence and sociability/communality (Glick and Fiske 1999), with women being ascribed communality and men being equated with agency. Thus, social roles organize in such a way that household and caring activities are perceived as more efficiently performed by women, whereas assertive paid work is perceived as more efficiently performed by men (Eagly and Wood 2016). This could make teleworking appealing for women as a way to have paid work while fulfilling caring roles. This stereotyped view can be problematic not only for the division of paid and unpaid work but also hierarchical relations, as agency and communality are associated with dominant and low-ranking group members, respectively (Ridgeway 2001). The impact of telework on gendered division of unpaid work is not universally agreed upon. Some studies conducted during the pandemic suggest that telework exacerbates gender imbalances in the division of domestic labor (Fuller and Qian 2021; Lyttelton et al. 2020), while others indicate that the division of unpaid work has become more gender-balanced (e.g., Carlson et al. 2022; Chung et al. 2021).

Previous studies conducted prior to the pandemic focusing on the imbalance perspective highlighted several disadvantages associated with telework, including social isolation (Charalampous et al. 2019; Gajendran and Harrison 2007; Golden and Veiga 2005), disconnection from the organization (Golden 2006; Nohara et al. 2010; Smith et al. 2015), and an increased workload (Casaca 2002). Conversely, the balance perspective presents a more optimistic view, highlighting some advantages of teleworking, such as the ability to allocate free time to leisure and family activities (Casaca 2002), greater autonomy, and flexible schedules (Fonner and Roloff 2010), among others. These factors often contribute to higher levels of job satisfaction among teleworkers compared to those in on-site arrangements (Allen et al. 2015; Baert et al. 2020; Charalampous et al. 2019; Fonner and Roloff 2010).

Regarding unpaid work, several studies demonstrated that during the COVID-19 pandemic lockdowns and consequent mandatory telework, there was an increase in the
perceived unpaid workload for both women and men (Carlson et al. 2022; Chung et al. 2021; Craig and Churchill 2020; Del Boca et al. 2020; Dunatchik et al. 2021). However, this increase was felt with greater impact by women, indicating that they likely continued to shoulder most of the household and caregiving burdens (Andrew et al. 2020; Chung et al. 2021; Del Boca et al. 2020; Lyttelton et al. 2020; Summers 2020; Yaish et al. 2021) while simultaneously fulfilling their roles and responsibilities in paid work. The pandemic has compelled women to place more focus on the family domain rather than the professional sphere, in contrast to what happened to men (Zoch et al. 2020). Thus, despite the flexibility afforded by telework, the increased prevalence of remote work during the pandemic did not significantly alter the division of unpaid work within couples, as gender roles continue to dictate the organization of domestic work (Dunatchik et al. 2021). This gender inequality may lead to different paid work outcomes for women and men, particularly in terms of job satisfaction, which is one of the most extensively studied work outcomes in the literature (Fonner and Roloff 2010).

Based on previous insights, the following hypotheses are derived, conceptualized in Figure 1:

**H1.** Teleworkers perceive a higher increase in unpaid work (household (H1a) and caregiving (H1b) tasks) than on-site workers.

**H2.** There is an interaction between sex and work arrangement with respect to the perception of increase in time spent on unpaid work (household (H2a) and caregiving (H2b) tasks): teleworkers (compared to working on-site workers) perceive a higher level of increase in time spent on unpaid work and more so for women than men.

**H3.** Women spend more time on unpaid work. Women perceive that they spend more time than their partner on household (H3a) and caregiving tasks (H3b), and men perceive that they spend less time than their partner on household (H3c) and caregiving tasks (H3d) (See Figure 2 for a conceptual model).

![Figure 1](image1.png)

**Figure 1.** Conceptual model of H1 and H2 combined regarding the perceived increase in unpaid work depending on work arrangement and sex.

**Figure 2.** Conceptual model of H3 regarding perceived division of unpaid work depending on sex.

2.2. Job Satisfaction and Teleworking Amidst the Pandemic

Job satisfaction has been defined in various ways in the literature. Vincent and Marmo (2018) define job satisfaction as a comparative relationship between an individual’s actual work experiences and their desired expectations from their work. Locke (1976, as cited in Batura et al. 2016) describes job satisfaction as a positive or pleasurable emotional state that arises from the evaluation of the work itself and the associated experiences. Boswell
et al. (2009) explain job satisfaction as an affective relationship with work that is influenced by situational factors such as the nature of work, elements of human resources, and the organizational environment. Smith et al. (2015) define job satisfaction as the level of pleasure and contentment an individual feels regarding their work.

Job satisfaction is associated with numerous organizational and individual benefits. These include greater motivation to work and achieve goals, increased efforts for self-development, and enhanced creativity (Ryu and Kim 2018). It also contributes to higher levels of commitment (Abel 2013), intention to stay in the organization, and reduced turnover (Vincent and Marmo 2018). Furthermore, job satisfaction is linked to lower levels of absenteeism, stress, and anxiety (Abel 2013) and is associated with higher levels of voluntary participation in tasks (Abel 2013; Ryu and Kim 2018). These findings highlight the importance of job satisfaction for both individuals and organizations.

Telework has a significant influence on external factors related to job satisfaction. The advantages and rewards associated with telework are manifold. They include greater autonomy (Fonner and Roloff 2010; Swisher 2019), increased time flexibility (Caillier 2011; Schall 2019; Smith et al. 2015; Swisher 2019), opportunities for leisure activities (Nohara et al. 2010), reduced commuting time (Gajendran and Harrison 2007), fewer interruptions during work, and decreased work-related stress (Illegems and Verbeke 2004), among others. Consequently, individuals who engage in telework often exhibit higher levels of job satisfaction compared to those in traditional on-site work arrangements (Allen et al. 2015; Baert et al. 2020; Bailey and Kurland 2002; Charalampous et al. 2019; Fonner and Roloff 2010; Gajendran and Harrison 2007; Golden and Veiga 2005; Golden 2006; Melo 2011; Nohara et al. 2010; Schall 2019; Vega et al. 2014). However, most of these studies did not account for gender differences and/or were conducted prior to the pandemic. Given the various contingencies brought about by the pandemic, including the increased burden of unpaid work, it is uncertain whether the levels of job satisfaction remained as high as those observed in the prepandemic period for both women and men (Ramos 2021). Moreover, it would be valuable to investigate what occurs when the spatial organization of paid and unpaid work is no longer distinct for women and men, as both are employed, working from home, and seemingly sharing similar conditions for household tasks and childcare responsibilities (Craig and Churchill 2020). More recent literature suggests that telework during the COVID-19 pandemic was associated with job satisfaction, but this association was also contingent upon gender and contextual factors (Durante et al. 2022; Laß et al. 2023; Sousa-Uva et al. 2021). The following hypotheses are derived, also depicted in Figure 3:

H4. Men have higher levels of job satisfaction than women.
H5. Teleworkers have higher levels of job satisfaction than on-site workers.
H6. There is an interaction effect of sex, work arrangement, and household (H6a) and caregiving (H6b) task division on job satisfaction. More precisely, for teleworking women, a division of unpaid work showing disparities disfavoring them is associated with lower levels of job satisfaction.

2.3. Caregiving Tasks and the Presence of Children in the Household during Telework

Baert et al. (2020) found that individuals with children at home experienced lower levels of job satisfaction during the pandemic. The closure of schools resulted in parents having to balance caring for their children with their paid work, leading to increased work–family conflict (Lemos et al. 2020). Teleworking women, in particular, had to significantly reduce their paid working time in order to attend to their children’s needs compared to men (Collins et al. 2020). This gender disparity in caregiving responsibilities is particularly pronounced in couples with younger children, who require more care and attention. It reflects an enduring gender inequality, whereby even under similar working conditions, disparities persist in the time dedicated to childcare. This situation not only places a burden on women but also underscores the challenges that gender inequality presents to their paid working hours, as women are disproportionately affected compared to men (Collins et al. 2020). Consequently, women with children often find themselves performing paid work at
night, taking advantage of their children’s sleeping hours to compensate for the overload of domestic work during the day. This situation raises concerns, as it implies that women are sacrificing their rest and leisure time for their professional pursuits (Casaca 2020). Possibly due to this type of family dynamics, women teleworking during the COVID-19 pandemic reported suffering from more anxiety, loneliness, and depressive feelings than men (Lyttelton et al. 2020), perceiving task overload (both family and professional) as exhausting (Casaca 2020). On the other hand, during the period of confinement, men were found to engage in more paid work compared to women. While men prioritized their paid work responsibilities, women assumed a greater share of domestic responsibilities (Andrew et al. 2020). As the demands of paid and unpaid work became increasingly challenging to reconcile, it was women who disproportionately reduced their hours of paid work (Collins et al. 2020; Fuller and Qian 2021; Mooi-Reci and Risman 2021).

Figure 3. Conceptual model of H4–6 regarding job satisfaction depending on sex, work arrangements, and perceived gender disparities in the division of unpaid work.

H7. There is an interaction effect of sex, parental status, and work arrangement on the perception of gender disparities in household (H7a) and caregiving (H7b) tasks (see Figure 4 for a conceptual model).

Figure 4. Conceptual model of H7 regarding gender disparities in the division of unpaid work depending on sex, work arrangements, and parental status.
A study by Nakrošienė et al. (2019) showed that in telework, having children had a negative effect on job satisfaction, as the presence of children at home considerably hindered task management and performance. Teleworking individuals with children reported more difficulties in daily tasks than individuals without children (Hjálmsdóttir and Bjarnadóttir 2020). However, the age of the children is important in determining the amount of effort, attention, and care required. Although some literature highlights the dual nature of caring for adolescents during the pandemic, as they have greater autonomy but higher mental well-being needs (Orellana et al. 2023), there is a generalized consensus that children up to primary school age (6 years old and below) require more attention and care than older children (Marchetti et al. 2020; Huebener et al. 2021). Moreover, regardless of age, the increase in time devoted to children was greater for women than for men. In on-site work arrangements, individuals inevitably allocated less time to childcare compared to teleworking individuals, indicating a reciprocal relationship between childcare and work arrangements (Del Boca et al. 2020). Recent data indicate that men tend to prefer on-site work over telework more than women (Kurowska et al. 2023), potentially resulting in a lesser burden of childcare responsibilities for men. This suggests that with telework emerging as a viable work arrangement in the post-pandemic era, corresponding adjustments in the division of unpaid work may occur. Therefore, it is important to consider the patterns and perceptions surrounding both paid and unpaid work during lockdown, as they establish a new baseline for family dynamics during times of challenges or crises. Notably, progress towards gender equality often faces setbacks during crises (Santos et al. 2021).

3. Materials and Methods

3.1. Participants

Participants in this study were recruited using a non-probabilistic convenience sampling method. Four participation criteria were established: participants must be (1) at least 18 years old, (2) currently employed (telework or work on site, (3) in a heterosexual relationship, and (4) living with a partner or spouse. A total of 329 individuals answered the questionnaire, but only 268 individuals met the inclusion criteria. Among participants, 154 were women, and 114 were men, with ages ranging from 20 to 71 (M = 45.7, SD = 10.55). Women’s mean age was 44.9 years old (SD = 10.26), while the men’s mean age was 46.9 years old (SD = 10.86). Most participants (63.4%) were married, and the other 36.6% were in a de facto union. As for their parental status, 19.4% (52 participants) had children in the age range of 0 to 6 years old. More than half of participants (57.8%) were teleworking. It is noteworthy that although 65.8% of men were teleworking, only 48.4% of women were in this situation. Hybrid workers were not considered in the sample to allow for a clear comparison between work arrangements (see Table 1 for demographics).

<table>
<thead>
<tr>
<th>Table 1. Sample demographics.</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
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<tr>
<td>----</td>
</tr>
<tr>
<td>Participant sex</td>
</tr>
<tr>
<td>Female</td>
</tr>
<tr>
<td>Male</td>
</tr>
<tr>
<td>Age</td>
</tr>
<tr>
<td>Children under 6 y.o.</td>
</tr>
<tr>
<td>Work arrangement</td>
</tr>
<tr>
<td>Telework</td>
</tr>
<tr>
<td>On site</td>
</tr>
<tr>
<td>^Participants who answered &quot;Yes&quot; when asked if they had children under 6 years old.</td>
</tr>
</tbody>
</table>

3.2. Procedure and Contextual Information

A self-administered questionnaire was created using the online survey platform Qualtrics (Qualtrics, Provo, UT, USA) and distributed through a network of informal
contacts, including family and friends. It was also disseminated via social media platforms such as Facebook and LinkedIn, as well as through email. Participants were encouraged to share the questionnaire with their contacts as part of a traditional snowball sampling strategy. Prior to making the questionnaire public, it was submitted to the Ethics Committee at the ISCTE—Instituto Universitário de Lisboa and received a favorable opinion (21/2021).

Participants were provided with a Qualtrics link and given the option to accept or decline participation after reading an informed consent statement. The statement included information about the study’s aims, research objectives, participation criteria, voluntary participation, contact details, and the anonymity and confidentiality of responses. The survey itself followed, with the measures described below.

After completing the questionnaire, participants were given a debriefing that thanked them for their participation, reminded them of the study’s purpose, and provided contact information for any questions or comments they may have.

The first cases of COVID-19 appeared in Portugal March 2020—later than other European countries, such as Italy. This allowed for some lessons to be learned regarding the spread of the disease and the usefulness of lockdowns. Still, as Portugal is an economically vulnerable country, long lockdowns were avoided. After a first lockdown until May 2020 (Sousa-Uva et al. 2021), strict social distancing measures were implemented but not enough to constrain the spread of the virus (Violante and Lanceiro 2021). In January 2021, the government instated another national lockdown, forcing telework whenever possible and closing schools/kindergartens. The questionnaire was administered during that period and was available online from 28 January 2021 to 8 March 2021. This timeframe also corresponded to a period during the pandemic when the population of Portugal was not yet fully vaccinated (which happened only in October 2021) and was under strict lockdown, affecting both kindergartens/schools and many jobs. Furthermore, because it was the second lockdown, a more stabilized experience of telework (with proper equipment, etc.) was to be expected, which was relevant for our study.

3.3. Instrument and Measures

The questionnaire developed for this study consisted of several sections. The first section included sociodemographic questions aimed at characterizing the sample. The second section focused on the amount, workload, and division of unpaid work within the couple, specifically related to childcare and household tasks. The third section addressed paid work satisfaction; finally, there was a debriefing section. The variables and corresponding instruments used in the research were as follows:

Increase in unpaid work: The perceived impact of the COVID-19 pandemic on the amount of time spent on unpaid work (household chores and caregiving) compared to the prepandemic period was assessed using a five-point Likert-type scale. Participants were asked, “Do you think you currently spend more or less time on these tasks compared to the pre-pandemic period?” The response options ranged from “much fewer hours” to “much more hours”.

Division of unpaid work: To determine the extent of the division of unpaid work within couples, the difference between the number of hours spent by the participant on household and caregiving tasks and those spent by their spouse or partner was calculated. Participants were asked to report the number of hours they and their spouse or partner spent on these tasks. Positive values indicated that the participant performed more tasks than their spouse or partner, while negative values represented the opposite. This measure was previously used by Santos et al. (2021).

Job satisfaction: The Job Satisfaction Scale developed by Bérubé et al. (2007) was utilized. This instrument consists of five items, such as “The conditions under which I do my work are excellent”, rated on a seven-point Likert-type scale. Participants were asked to reflect on their current work arrangement and indicate their level of agreement or disagreement with the presented statements.
Work arrangement: Participants were asked to indicate whether they were in a “teleworking or hybrid” work arrangement or an “on-site work” arrangement. Individuals who did not fall into either of these work arrangements were not included in this study, as we intended to compare these two groups.

Parental Status: Participants were asked if they had children under 6 years of age living with them in their household.

### 3.4. Analytic Strategy

Once data collection was concluded, statistical analysis began using IBM SPSS Statistics version 26 and the Macro PROCESS version 3.4 (Hayes 2017).

### 4. Results

Table 2 summarizes the overall descriptive statistics for all dependent variables considered (increase in unpaid work, job satisfaction, and division of unpaid work broken down by each of the analyzed independent variables (work arrangement, sex, and having children under 6 years old)).

<table>
<thead>
<tr>
<th>Work Arrangement</th>
<th>Children under 6 y.o.</th>
<th>Sex</th>
<th>Increase in Household Tasks</th>
<th>Increase in Caregiving</th>
<th>Job Satisfaction</th>
<th>Division of Household Tasks</th>
<th>Division of Caregiving</th>
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<td>51</td>
<td>47</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mean 3.31</td>
<td>3.63</td>
<td>3.87</td>
<td>8.48</td>
<td>3.53</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td>1.28</td>
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<tr>
<td></td>
<td></td>
<td>Men</td>
<td>N 31</td>
<td>23</td>
<td>31</td>
<td>29</td>
<td>18</td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td>5.03</td>
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<td></td>
<td></td>
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<td>1.01</td>
<td>10.52</td>
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<tr>
<td></td>
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<td>N 22</td>
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<td>6.09</td>
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<tr>
<td></td>
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### 4.1. The Increase in Workload of Unpaid Work during COVID-19—Effects of Sex and Work Arrangement

To test the relationship between participants’ sex and work arrangements, and women and men’s perceptions of the increase in time spent on (a) household and (b) caregiving tasks, a two-way ANOVA was performed considering work arrangement (vs. on-site working) and participants’ sex (women vs. men) as factors, allowing us to simultaneously test H1 and H2. The same procedure was conducted for both household and caregiving tasks.

The main effect of participants’ sex on time spent on household chores during the COVID-19 pandemic was not statistically significant (F (1,264) = 0.36, p = 0.55, η2p = 0.001). This suggests that both women (M = 3.43, SD = 0.783) and men (M = 3.56, SD = 0.717) perceived an increase in household chores during this period. There was a significant main effect of work arrangements (F (1,264) = 11.93, p < 0.001, η2p = 0.04). Teleworkers
reported a greater increase in household chores during the pandemic (M = 3.61, SD = 0.757) compared to on-site workers (M = 3.31, SD = 0.656), as predicted in H1a. The interaction effect between participants’ sex and work arrangement only showed marginal significance (F (1,264) = 3.52, p = 0.06, η²p = 0.01). Based on these findings, it can be concluded that both women and men perceived a greater increase in time spent on household tasks while teleworking compared to working on site, which does not support H2a.

Regarding caregiving tasks, there were no significant differences in terms of the increase in unpaid work based on participants’ sex (F (1,199) = 0.152, p = 0.70, η²p = 0.001). The statistical effect of work arrangements on the perception of increased time spent on caregiving tasks was also not statistically significant (F (1,199) = 2.16, p = 0.14, η²p = 0.01). In fact, both men (M = 3.59, SD = 0.87) and women (M = 3.54, SD = 0.85) perceived an increase in their time spent on caregiving tasks, and the same was observed for both teleworkers (M = 3.61, SD = 0.90) and on-site workers (M = 3.49, SD = 0.79), not supporting H1b. However, the interaction effect of sex and work arrangement on the perception of an increase in the time spent on caregiving tasks was statistically significant (F (1,199) = 9.65, p = 0.002, η²p = 0.05). Among women, the increase in caregiving workload did not differ based on their work arrangement (M = 3.65, SD = 0.117 for on-site workers and M = 3.45, SD = 0.105 for teleworking women). In contrast, men reported a greater increase in the time spent on caregiving tasks while teleworking (M = 3.79, SD = 0.112) compared to when working on site (M = 3.23, SD = 0.151) (Figure 5). In summary, these results support H2b, but only for men.

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Figure 5. Perception of increased workload in caregiving tasks for men and women while teleworking and working on site.

4.2. Division of Unpaid Work during COVID-19—Effects of Sex, Work Arrangement, and Parental Status

Regarding the hypothesis stating that differences between men and women in the perception of division of unpaid work (household and caregiving tasks) are influenced by their work arrangement during pandemic times, as well as by their parental status, namely, being a parent of a young child, a 2 × 2 × 2 GLM was conducted using sex, work arrangement (telework and on-site work), and parental status (having/not having a child under six years old) as factors. The same procedure was used for household and caregiving tasks.

Results revealed a significant main effect of sex (F(1,249) = 16.75, p < 0.001, η²p = 0.32) on the division of household tasks, indicating that women experienced a greater dispar-
ity, working, on average, 6.7 h more than their partners (SD = 8.97), compared to men, who worked, on average, 4.6 h less than their partners (SD = 8.78), supporting H3a and H3c. None of the main effects of work arrangement and living with young children were significant. However, the interaction between two of the variables (living with young children and work arrangement) was statistically significant (F(1,249) = 4.854, $p < 0.05$, $\eta^2_p = 0.03$). Specifically, when there were no young children in the household, there was no significant difference in the overall disparity between self and partner’s hours spent on household tasks ($\Delta M = 0.619$, $p > 0.05$). However, when participants had children under six years old in the household, a significant mean difference was observed, with teleworkers reporting that they spent considerably more time than their partner on these tasks ($\Delta M = 5.89$, $t(249) = 2.65$, $p < 0.05$). The overall impact of participants’ sex on this interaction between work arrangement and parental status was not significant (F(1,249) = 2.55, $p > 0.05$, $\eta^2_p = 0.01$), supporting H7a. These results provide further evidence and support for the complex interplay between gender, work arrangements, and parental responsibilities in the division of household tasks.

To investigate the hypothesis that differences in the division of caregiving tasks between men and women are influenced not only by their work arrangement during the pandemic lockdown but also by their parental status, a $2 \times 2 \times 2$ GLM was conducted. The factors included sex, work arrangement (telework and on-site work), and parental status (having or not having at least a child under six years old in the household).

The results revealed a significant main effect of sex (F(1,181) = 17.89, $p < 0.001$, $\eta^2_p = 0.09$) in the division of caregiving tasks. Women exhibited a greater disparity in their disadvantage ($M = 5.93$ h) compared to men ($M = -3.68$ h), supporting H3b and H3d. However, the main effects of work arrangement and having young children were not individually significant, and there was no significant interaction between parental status and work arrangement.

Nevertheless, an important finding emerged from the interaction between participants’ sex and parenting. Specifically, when there were no young children in the household, the overall disparity between self and partner’s hours spent on household tasks did not differ significantly between men and women ($\Delta M = 3.05$ h, $p > 0.05$). However, when participants had children under six years old, significant mean differences were observed. Women reported spending considerably more time than their partners on these tasks, with an average difference of 16.18 h ($t(249) = 3.92$, $p < 0.001$). The overall impact of participants’ work arrangement on this interaction between sex and parental status was not significant (F(1,249) = 2.55, $p > 0.05$, $\eta^2_p = 0.01$). These results partially support H7b, shedding light on the intricate dynamics of gender, parenting, and the division of caregiving tasks (see Figure 6).

### 4.3. Division of Unpaid Work, Work Arrangement, Participant Sex, and Job Satisfaction

A multiple regression model was tested to investigate whether the association between division of household tasks and job satisfaction is affected by work arrangement and participant sex. Parental status, specifically having children between 0 and 6 years old, was included as a covariate. A similar procedure was followed for the division of caregiving tasks. The continuous independent variables were centered, and the predictors and interactions were entered into a simultaneous regression model using the SPSS Macro PROCESS, model 3 (Hayes 2017).

Regarding the division of household tasks, the overall regression model was found to be statistically significant, explaining 7.3% of the variance in job satisfaction ($R^2 = 0.076$, $F(8,253) = 2.491$, $p < 0.05$). Notably, work arrangement demonstrated a direct effect on job satisfaction, as teleworkers reported higher levels of job satisfaction compared to on-site workers ($b = 0.81$, $t(253) = 2.673$, $p < 0.01$), as shown in Table 2. Furthermore, an interaction effect between participants’ sex and work arrangement on job satisfaction was observed ($b = -0.54$, $t(253) = -2.605$, $p < 0.02$). In addition, the covariate of parental status (having children between 0 and 6 years old) did not show a significant effect on the association
between division of household tasks and job satisfaction, as indicated by its non-significant contribution to the multiple regression model.

![Figure 6](image-url)  
**Figure 6.** Perception of increased workload in caregiving tasks for men and women with/without children under 6 years old.

The combined effect of participant sex, division of caregiving tasks, and work arrangement did not reach statistical significance ($p > 0.05$). A graphical representation of this double moderation analysis (see Figure 7) reveals that only teleworking women exhibit a noticeable decrease in job satisfaction when faced with a higher workload of household tasks compared to their partners. This effect does not appear to be present among women working on site or among men in general in the context of this study.

![Figure 7](image-url)  
**Figure 7.** Combined effect of participant sex, division of household chores, and work arrangement on job satisfaction.

As for the division of caregiving tasks, the overall model was marginally statistically significant and accounted for 7.6% of the variance in job satisfaction ($R^2 = 0.076$, $F(8,177) = 1.796, p < 0.08$). The results indicate that the division of caregiving tasks had
a direct statistical impact on job satisfaction (see Table 3). Specifically, a higher load of caregiving tasks was associated with lower job satisfaction among participants ($b = -0.07$, $t(177) = -2.325$, $p < 0.02$). Additionally, participant sex had a marginally significant direct effect ($b = 0.41$, $t(177) = 1.855$, $p < 0.07$), suggesting that men tended to have higher levels of job satisfaction, aligning with the trend suggested by H4.

Table 3. Impact of division of household tasks, work arrangement, and participant sex on job satisfaction.

<table>
<thead>
<tr>
<th></th>
<th>b</th>
<th>SE</th>
<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
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</thead>
<tbody>
<tr>
<td>Division of household tasks (DHT)</td>
<td>-0.05</td>
<td>0.029</td>
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<td>0.077</td>
<td>-0.1100</td>
<td>0.0056</td>
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<td>Sex (S)</td>
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<td>0.106</td>
<td>-0.0725</td>
<td>0.7474</td>
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<tr>
<td>DHT × S</td>
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<td>0.019</td>
<td>1.443</td>
<td>0.150</td>
<td>-0.0101</td>
<td>0.0654</td>
</tr>
<tr>
<td>Work arrangement (WA)</td>
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<td>0.303</td>
<td>2.696</td>
<td>0.008</td>
<td>0.2206</td>
<td>1.4159</td>
</tr>
<tr>
<td>DHT × WA</td>
<td>-0.05</td>
<td>0.029</td>
<td>-1.671</td>
<td>0.096</td>
<td>-0.1068</td>
<td>0.0088</td>
</tr>
<tr>
<td>S × WA</td>
<td>-0.54</td>
<td>0.208</td>
<td>-2.605</td>
<td>0.010</td>
<td>-0.9514</td>
<td>-0.1320</td>
</tr>
<tr>
<td>DHT × S × WA</td>
<td>0.022</td>
<td>0.019</td>
<td>1.126</td>
<td>0.261</td>
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<td>Parental status</td>
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<td>0.805</td>
<td>0.423</td>
<td>-0.2466</td>
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Furthermore, there was a combined effect of participant sex and the division of caregiving tasks on job satisfaction ($b = 0.06$, $t(182) = 2.170$, $p < 0.05$), indicating that the interaction between sex and caregiving tasks influenced job satisfaction (see Table 4). Additionally, there was a marginally significant combined effect of work arrangement and the division of caregiving tasks ($b = -0.05$, $t(177) = -1.783$, $p < 0.08$), as well as participant sex and work arrangement ($b = -0.36$, $t(182) = -1.812$, $p < 0.07$), on job satisfaction. These findings suggest that the combination of work arrangement, sex, and the division of caregiving tasks may contribute to the overall level of job satisfaction experienced by individuals.

Table 4. Predicting job satisfaction based on the division of caregiving tasks, work arrangement, and participant sex.

<table>
<thead>
<tr>
<th></th>
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<th>t</th>
<th>p</th>
<th>LLCI</th>
<th>ULCI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of caregiving tasks (DHT)</td>
<td>-0.07</td>
<td>0.031</td>
<td>-2.325</td>
<td>0.02</td>
<td>-0.1317</td>
<td>-0.0108</td>
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<td>Sex (S)</td>
<td>0.41</td>
<td>0.224</td>
<td>1.855</td>
<td>0.07</td>
<td>-0.0266</td>
<td>0.8562</td>
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<tr>
<td>DHT × S</td>
<td>0.06</td>
<td>0.027</td>
<td>2.169</td>
<td>0.03</td>
<td>0.0053</td>
<td>0.1122</td>
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<tr>
<td>Work arrangement (WA)</td>
<td>0.50</td>
<td>0.320</td>
<td>1.560</td>
<td>0.12</td>
<td>-0.1321</td>
<td>1.1288</td>
</tr>
<tr>
<td>DHT × WA</td>
<td>-0.05</td>
<td>0.030</td>
<td>-1.783</td>
<td>0.08</td>
<td>-0.1116</td>
<td>0.0057</td>
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<tr>
<td>S × WA</td>
<td>-0.36</td>
<td>0.223</td>
<td>-1.637</td>
<td>0.10</td>
<td>-0.8038</td>
<td>0.0749</td>
</tr>
<tr>
<td>DHT × S × WA</td>
<td>0.04</td>
<td>0.027</td>
<td>1.679</td>
<td>0.10</td>
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<td>1.322</td>
<td>0.19</td>
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More importantly, the combined effect of participant sex, division of caregiving tasks, and work arrangement proved to have a marginally statistically significant impact on job satisfaction ($b = 0.04$, $t(177) = 1.679$, $p < 0.10$). This double moderated effect is depicted in Figure 8. The findings revealed that for teleworking women, an increase in caregiving workload (expressed as a positive difference score) was associated with lower job satisfaction ($b = -0.02$, $t(177) = -1.979$, $p < 0.05$). It appears that higher caregiving workloads have a detrimental effect on the job satisfaction of women.
19 pandemic, as well as the influence of parental status on the division of unpaid work, women reported a greater increase in household chores while teleworking compared to (Bianchi et al. 2000; Gupta 2006).

Turning to the increase in caregiving tasks, no significant differences were found based on participant sex. Both men and women reported a greater increase in household chores while teleworking compared to those working on site.

Turning to the increase in caregiving tasks, no significant differences were found based on participant sex. Both men and women reported an increase in time spent on caregiving tasks during the pandemic.

Similarly, the main effect of work arrangement on the division of caregiving tasks was not statistically significant. Teleworkers and on-site workers reported similar increases in time spent on caregiving tasks.

On the other hand, for teleworking men, the effect was only marginally significant and in the opposite direction. There was a trend towards a positive association between contributing more to caregiving tasks and higher job satisfaction in the paid work sphere (b = 0.08, t(177) = 1.937, p < 0.06). It is important to note that these results should be interpreted with caution due to the small observed effect sizes.

5. Discussion

The present study aimed to investigate the relationship between participant sex, work arrangement, and the perceived increase in time spent on unpaid work during the COVID-19 pandemic, as well as the influence of parental status on the division of unpaid work, and to assess how these variables are associated with job satisfaction. To the best of our knowledge, previous research has addressed these factors but not in a common framework.

First, regarding the increase in household chores, our results show that participant sex did not have a statistically significant effect. Both men and women reported perceiving an increase in household tasks during the pandemic, supporting the notion that the COVID-19 crisis has led to some redistribution of domestic responsibilities, regardless of gender roles (Bianchi et al. 2000; Gupta 2006).

Furthermore, the analysis revealed a significant main effect of work arrangement on time spent on household chores. Teleworkers reported a greater increase in household tasks compared to on-site workers. This finding aligns with previous research indicating that work-from-home arrangements can blur the boundaries between work and personal life, leading to a heightened perception of household responsibilities (Amstad et al. 2011; Hill et al. 2008).

Interestingly, the interaction effect between participant sex and work arrangement on time spent on household chores showed marginally significant differences. Both men and women reported a greater increase in household chores while teleworking compared to those working on site.

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spent on caregiving tasks, suggesting that work arrangements may not significantly influence the division of caregiving responsibilities (Hammer et al. 2011; Kossek and Michel 2011).

However, the interaction effect between participant sex and parental status on the division of caregiving tasks was found to be significant. Women with children under six years old reported significantly more time spent on caregiving tasks than their partner compared to men in the same parental category. These findings underscore the persistence of traditional gendered caregiving roles and the continued burden placed on women in terms of caregiving responsibilities (Perry-Jenkins and Gerstel 2020).

Despite the results showing no differences based on participant sex regarding the increase in domestic workload and caregiving tasks, the same was not true regarding the division of domestic labor. Women perceived themselves as doing more than their partners with respect to both household chores and caregiving tasks.

In addition to the division of unpaid work, our study also examined the influence of participant sex, work arrangement, and parental status on the division of unpaid work during the pandemic. Our results show that when participants had children under six years old, teleworkers reported that they spent more time than their partner on household tasks, regardless of sex. We can infer that those who work on site may have found strategies to outsource childcare when they were working (e.g., teleworking partners, using the network of schools that were kept open to assist children of essential workers, or other guardians); in those cases, unpaid work would not feel much different than prepandemic levels.

This study also highlights the evolving nature of household chores and caregiving tasks during the COVID-19 pandemic. It underscores the importance of considering the interplay between participant sex, work arrangement, and parental status when examining the division of labor within households. By addressing these issues and implementing targeted interventions, we can strive towards a more equitable distribution of domestic responsibilities, ultimately promoting gender equality and work–family balance. Based on the results of this study, it is evident that the division of household chores and caregiving tasks underwent changes during the lockdown period imposed during the COVID-19 pandemic. However, the findings do not clearly indicate whether traditional inequalities between men and women were definitively increased or diminished. While it is true that both men and women reported increased responsibilities in household chores and caregiving tasks, the study found that participant sex alone did not significantly influence this perception. This suggests a potential shift away from traditional gender roles and a move towards more equitable sharing of domestic responsibilities. However, despite an increase in workload for both genders, women and men agree that women perform more unpaid work (both household and caregiving tasks) than their partners. Furthermore, it is important to note that women with young children faced a disproportionate increase in caregiving tasks, indicating the persistence of gendered caregiving responsibilities. This finding suggests that traditional inequalities may have been perpetuated or exacerbated during the lockdown, particularly for women with childcare responsibilities.

These findings allow for different interpretations that future research can address. For instance, we can speculate from the perspective of contribution, that is, when men perceive doing more than women, they are stepping in to help in an exceptional circumstance, and this sense of contribution spills over to the paid work sphere. A longitudinal approach continuing after the lockdown periods would have been ideal to determine whether the contribution explanation would hold true when life went back to a new normal, although it would still be relevant to address the interplay between paid and unpaid work aspects in light of the increase in telework after the pandemic.

Apart from other studies that could further explore this research area, it is important to acknowledge the limitations of the study conducted here. We aimed to provide a comprehensive understanding by considering multiple factors within a common framework. However, the circumstances of the pandemic lockdowns posed challenges in terms of anticipating appropriate methodological approaches. We had to act and react quickly, and convenience sampling was the most feasible approach under such circumstances.
Nonetheless, due to the non-representative nature of our samples, the generalizability of our results is limited. For instance, the sample does not match population characteristics in terms of age according to the latest census (Instituto Nacional de Estatística 2023), and the convenience aspect also highlights a high likelihood of having recruited participants among personal acquaintances, which is an important source of bias.

Another limitation is that our data were collected cross-sectionally at a single time point. This makes them more susceptible to common method bias (Podsakoff et al. 2003). To mitigate this potential bias, future studies could consider measuring job satisfaction and/or time spent on unpaid work at different time points compared to other variables such as participant sex, parental status, and work arrangement.

Additionally, we lacked data from dyads, meaning we did not have information from both members of a given couple. This limited our ability to make direct comparisons between sexes within the same household or to ensure that both partners were working full-time paid jobs. For example, certain industries such as hospitality and tourism experienced significant downsizing during the pandemic. Moreover, while we found significant statistical effects for most of our hypotheses, it is important to note that the effect sizes and the magnitude of these effects were generally small, probably due to our small sample size. Indeed, as per the literature and posthoc power analyses conducted (Faul et al. 2007), based on sample size, degrees of freedom and effect sizes found. Power (1-β) was found to be below 0.7, and as per convention (Cohen 1988), values of 0.8 and above should be considered robust. In other words, our analyses lack statistical power due to the small sample size, which also resulted in not finding statistical differences that would have been observed with a larger sample. Therefore, caution must be exercised in interpreting the results.

Finally, due to our limited sample size, we were unable to adequately test a comprehensive model incorporating the interactive effects of sex, work arrangement, division of unpaid work, and parental status. Formulating, analyzing, and interpreting such a hypothesis would have been challenging. However, when considering our results collectively, they suggest that teleworking women with young children are particularly impacted by gender disparities in unpaid work, leading to lower satisfaction with their paid work. This situation can be described as a lose–lose scenario concerning both paid and unpaid work.

Considering these limitations, future research should strive to address these methodological challenges and expand on our findings. Longitudinal studies that capture data at multiple time points would provide a more robust understanding of the dynamics between household tasks, job satisfaction, and other factors. Additionally, including dyadic data would allow for more nuanced analyses and a better understanding of the division of labor within couples. Finally, exploring interventions or policies that aim to mitigate gender inequalities in household and caregiving tasks during crises like the pandemic could have important implications for improving work–life balance and gender equality.

6. Conclusions

Overall, our study highlights the complex interplay between participant sex, work arrangement, and parental status in shaping the division of household chores and caregiving tasks during the COVID-19 pandemic. It underscores the need for policies and interventions that address gender inequalities and support work–family balance.

By examining various factors (comparing teleworkers with on-site workers, men and women, parents of young children versus non-parents, and the difference in hours spent on housework and caregiving between oneself and one’s partner while also considering job satisfaction), our study aimed to contribute to the literature, which has been somewhat fragmented on the topic of gender differences in paid and unpaid work. However, this complex phenomenon necessitates exploration at multiple levels of analysis. Unfortunately, our study only captured the individual perspective. Future research should aim to incorporate not only micro-level factors but also meso-level factors (e.g., organizational) and
This work calls to attention to the way that the COVID-19 pandemic has not only highlighted existing gender inequalities but has also created new challenges with respect to achieving gender equality. The pandemic has exposed and exacerbated the unequal distribution of care work, with women more likely to take on additional caregiving responsibilities due to school and daycare closures (Alon et al. 2020; Collins et al. 2020; Santos et al. 2022). In the aftermath of the pandemic, it is plausible to speculate that women will be expected to dedicate time to unpaid work whenever needed (e.g., sick children, strikes, etc.). The social and emotional impacts of the pandemic, including loneliness and social isolation, have also been more pronounced for vulnerable groups such as women and those with caregiving responsibilities (Bu et al. 2020).

To address these challenges and ensure a more gender-equitable recovery from the pandemic, it is crucial to include women’s voices in decision-making processes and to invest in policies and programs that support gender equality (UN Women 2020; World Economic Forum 2021). Based on literature on the topic of paid and unpaid work (Leahy and Doughney 2006), gender inequalities at these levels could be mitigated if unpaid work were to occupy a higher status with respect to its contribution to society. Indeed, household tasks and caregiving are not considered valuable work: “The term work keeps being limited to paid work by using the term family (or life) to distinguish unpaid work from (real) work, e.g., in studies on work–life balance” (Madörin and Jacinto 2023, p. 2). Thus, a focus on providing women with the same standards in paid work is a possible avenue for gender equality but might not be the only one or even not the most effective one compared with, for instance, acknowledging and appreciating unpaid work as valuable and economically significant (Madörin 2010).

Also, while the COVID-19 pandemic demonstrated that paid work can be effectively carried out in a telework arrangement, most unpaid work still necessitates physical presence on site. As we move into the post-pandemic era, organizations have recognized the benefits of maintaining telework or hybrid work arrangements, indicating that telework is here to stay. For numerous families, telework appears to offer a promising solution for managing the demands of both paid and unpaid work. However, it is important to recognize that telework can be a double-edged sword. Even during the pandemic lockdowns, our data indicate that individuals who continued to perform paid work on site experienced a lesser burden in terms of unpaid workload compared to teleworkers, particularly women. Furthermore, recent findings from a longitudinal survey (Kurowska et al. 2023) suggest that men are more inclined to prefer working on site after the COVID-19 crisis, while women tend to lean towards telework. Although this may initially seem like a way to provide autonomy in navigating between paid and unpaid work, it could have concerning consequences for women, potentially resulting in an overwhelming burden of both paid and unpaid work.

To mitigate this potential threat, promoting hybrid work arrangements for all individuals could be a viable solution. This would involve negotiating the allocation of telework days based on the specific needs of unpaid work within couples. Encouragingly, our data also highlight that teleworking men who are more willing to contribute to unpaid work do not experience a negative impact on their job satisfaction.

In summary, flexibility—both from organizations in promoting hybrid work arrangements and from families in the distribution of unpaid work—appears to be key in building balanced and prosperous societies in the post-COVID world. By embracing this flexibility, we can strive to create environments that support individuals in effectively managing both their paid and unpaid responsibilities, leading to improved overall well-being and work–life harmony.

Policymakers should consider implementing policies that promote work–family balance and gender equality, such as flexible work arrangements, affordable childcare options, and support for parental leave. Also, employers can play a crucial role in facilitating a
more equitable division of household chores and caregiving tasks by fostering a culture of work–life balance, implementing family-friendly policies, and addressing gender biases in the workplace. Promoting awareness and education about gender roles and stereotypes can help challenge traditional norms and promote more equitable divisions of labor within households. Building support networks for caregivers, including both men and women, can provide valuable resources and assistance in managing household responsibilities (e.g., Fulcher et al. 2023).

Overall, the findings of this study highlight the need for ongoing efforts to promote gender equality and address the persistent gendered division of household labor. Policy interventions, organizational practices, and education and awareness initiatives can all contribute to creating a more equitable society and mitigating traditional inequalities between men and women.


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**Informed Consent Statement:** Informed consent was obtained from all study participants.

**Data Availability Statement:** The original data collected and used in this paper, as well as the output of analyses conducted can be found here: https://osf.io/egqd2/.

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