



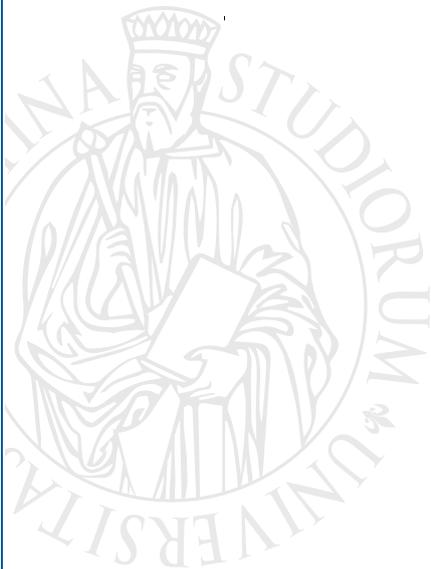
UNIVERSITÀ  
DEGLI STUDI  
FIRENZE

**DISIA**

DIPARTIMENTO DI STATISTICA,  
INFORMATICA, APPLICAZIONI  
"GIUSEPPE PARENTI"

**Covid-19 as an  
Engine of Family Reshuffling.  
Gender Equality and Relationship Quality  
during the Pandemic**

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**DISIA WORKING PAPER  
2022/01**

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# Covid-19 as an Engine of Family Reshuffling Gender Equality and Relationship Quality during the Pandemic

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## Abstract

The consequences of the Covid-19 pandemic are not limited solely to health and economics; couples' relationships are also affected. There is, though, insufficient evidence as to how families are adapting to the new normal and the pandemic's long-term effects on relationship quality. We use novel population-level data collected in September 2021 in Italy as part of the *Familydemic Survey* to examine variation and correlates of relationship quality in the advanced stages of the pandemic. Our findings suggest that the pandemic is responsible for huge variations in family life. When children are involved, approximately 45–50% of couples experienced changes in their relationship satisfaction. Couples have attempted to adapt to the new reality, experiencing both gains and losses in relationship quality. For couples with less egalitarian gender attitudes, and for couples in which the pandemic has fostered preexisting domestic gender inequalities, relationship quality declined. For more egalitarian couples, and for couples in which the pandemic has offered the opportunity for a new equilibrium with a more balanced division of unpaid work, relationship quality improved.

**Keywords:** Gender equality; Relationship quality; Covid-19; Pandemic; Italy; Familydemic survey

## Acknowledgments

The participants in the *University of Florence Population and Society Unit* (UPS) and in the *2021 International Divorce Conference* are gratefully acknowledged for their useful comments. The data used in the paper come from the *Familydemic Survey* which was a collaborative effort of an international research network coordinated by Anna Kurowska (the coordination of the project was financed by NCN, grant 2020/37/B/HS5/02703).

## 1. Introduction

In the initial phase of the Covid-19 pandemic, scholars chiefly examined its physical and economic consequences. However, couples and intimate relationships have also been affected (Craig & Churchill 2020; Guetto et al. 2021; Egidi & Manfredi 2021). For long periods of the crisis, many partners were forced to live together, locked inside the same home for weeks on end, with the threat of serious illness for themselves and their loved ones. Indeed, couples have been kept in isolation during a relatively large part of the pandemic. Moreover, the massive pandemic-induced socioeconomic changes and mounting uncertainty over the future have disrupted multiple aspects of family life. A crucial question is thus: *(how) does the Covid-19 disaster, and the responses to it, relate to couples' relationship quality?* A poor-quality relationship generates unhappiness within the couple and the closest people involved. It may have severe family-related consequences, including low fertility (Rijken & Liefbroer 2009; Mencarini et al. 2018) and separation (Birditt et al. 2020; Boertien & Härkönen 2018).

The studies published in the first months of the pandemic suggested a somewhat convergent narrative; namely, that the pandemic had had a negative effect on relationship quality (e.g., Balzarini et al. 2020; Ahuja & Khurana 2021; Eder et al. 2021). Nonetheless, most of these studies were based on selected convenience samples. Only recently have population-level studies begun to emerge. For instance, Schmid et al. (2021), analyzing the German experience through Pairfam data (wave 11) and its supplementary Covid-19 web-survey, depicted a more complex picture. They found that a substantial proportion of respondents had experienced both negative *and* positive changes in relationship satisfaction during the crisis. Their study advises that the pandemic is generating more heterogeneous effects on family life than a rapid glance might suggest.

Moreover, virtually only the short-term consequences of the pandemic have been explored. Clearly, in the initial stages, couples' intimate relationships were especially affected by psychological stressors (Balzarini et al. 2020; Luetke et al. 2020; Ahuja & Khurana 2021), with only minor socio-demographic differentials—as shown in the case of Italy (Bellani & Vignoli 2020, 2022). Nonetheless, the dimension of the current pandemic—given its duration and pervasiveness—cannot be usefully compared to short-term shocks. The resulting recession has produced unprecedented economic losses and has affected existing social divides along several dimensions, including the division of paid and unpaid work within couples. Several of these effects are temporary (Rodríguez Sánchez et al. 2021), and have either been weakened or reinforced according to the severity of the restrictions. However, given the recent changes to the organization of work and family life driven by the pandemic (Craig 2020), it would be worth reflecting upon how families adapt and thrive in these new and challenging conditions over the longer-term. We noted a lack of empirical studies taking a

longer-term perspective on: how families are adapting to the pandemic; how couples' gender equality is evolving in response to the new demands of paid and unpaid work; and how this new normal is associated with relationship quality. We thus seek to address these oversights by consulting novel population-level data collected in September 2021 in Italy, and exploring changes in couples' role-sets and relationship quality 18 months after the onset of the pandemic. This study offers new evidence for deeper insights into how families have been coping in the Covid-19 world.

## **2. Background**

Based on theoretical considerations and a summary of related research, we here present our set of research hypotheses. It is worth noting that conducting an exhaustive literature review on the topic was extremely challenging due to ballooning research on the pandemic.

### ***2.1 Gender equality and relationship quality during Covid-19***

The theoretical linkages between couples' role-sets and family-related outcomes are demarcated by the changing gender roles in terms of reconciling economic support and care responsibilities within the family (see Olah et al. 2021 for a review). Women's paid work engagement has become commonplace, but men's involvement in care and home responsibilities has experienced a slower corresponding evolution (Anxo et al. 2011). To overcome the "double burden" model for women, a parallel—or delayed—engagement of fathers in care and housework is then necessary (Altintas & Sullivan 2017); or at least it is when the outsourcing (inside or outside the enlarged family) of care and domestic work is not an option. In the long term, to reach the "dual breadwinner–dual carer" model, partners will have to share both economic and domestic responsibilities (Oláh et al. 2018). Building on the seminal work of McDonald (2000), two perspectives on family demography have linked these developments with, among other things, relationship quality; namely, the Gender Revolution (Goldscheider et al. 2015) and the Multiple Equilibrium framework (Esping-Andersen and Billari 2015). Both approaches—though fueled by diverse theoretical standpoints—emphasize women's and men's roles in the process of reaching gender equality. In the first phase of the process, women's activity outside the home increases, while the second phase involves men increasing their relative engagement in family tasks. The changes in behaviors encompassing these two phases must be made possible by an anticipated shift in gender-role attitudes<sup>1</sup> (Lappegård et al. 2021). The first phase may induce couple dissatisfaction because of the double burden on women due to their concomitant activities in both paid and unpaid work—male partners marginally helping with the

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<sup>1</sup> Following the *Encyclopedia of Sociology*, we use gender-role attitudes, gender attitudes, gender ideology, and gender role ideology interchangeably.

latter. The second phase may foster more stable relationships due to the equal sharing of activities both inside and outside the home. Despite progress, no country has yet achieved complete gender parity in either sphere of work (not even the Nordic states; see, e.g., Goldscheider et al. 2010; Kolk 2019; Lappegård et al. 2021). Nonetheless, while taking into account how the mechanisms of lagged generational change slow the adaptation rate, the division of labor continues to develop toward gender equality (Sullivan et al. 2018).

The development toward gender equality could be facilitated or inhibited by the current pandemic. Indeed, natural disasters as well as social catastrophes (wars and revolutions) are known to impact relationships (e.g., Nakonezny et al. 2004; Cohan et al. 2009). Cohan and Cole (2002), for instance, studying forms of family-related behavior following Hurricane Hugo in 1989, concluded that this “natural disaster mobilized people to take action” (p. 21). During the initial stages of the current pandemic, stay-at-home orders suddenly removed the spatial and temporal divide in the organization of paid and unpaid work for the vast majority of couples (Craig 2020). This continued for several months after the onset of the pandemic—with different characterizations depending on the diffusion of the pandemic and country-specific outbreak responses.

On the one side, the pandemic’s impact has not been gender-neutral, and such factors as gender inequality, lack of economic resources, and disrupted social support networks have all placed women at an increased risk of adversity. Indirect stressors, such as fear of illness and death, and the direct stressors, such as economic and social disruptions, have had a gendered impact on couples depending both on their pre-pandemic level of relationship quality and their exposure to the pandemic (Walsh & Stephenson 2021). Due to Covid-19 school closures, the pandemic has exacerbated gender inequalities regarding the division of household labor, with women continuing to perform the lion’s share, as well as taking on more childcare (Calarco et al. 2021; Çoban 2021; Del Boca et al. 2020, 2021). In these kind of situations, individuals are more likely to be overly critical or argumentative, blame their partner unjustly or hastily, provide poor support and, over time, become less satisfied with their relationship (Neff & Karney 2009; Barton & Bryant 2016; Barton et al. 2018). On the other side, some partners might use the additional time together to strengthen the connections between them, re-evaluating perhaps priorities and family organization (Cluver et al. 2020), with male partners and fathers becoming more involved with their partners and children (Mangiavacchi et al. 2020). Consequently, some couples may experience relationship gains by activating adaptive resources in a positive way. The pandemic becomes a “forced opportunity” for strengthening intimacy and relationship satisfaction (Aydogan et al. 2021).

The key point is whether these changes towards greater or weaker gender equality have contributed to the rise of a new normal (with implications for relationship satisfaction). Due to the

current “forced experiment on gender equality” (Alon et al. 2020: 24), many male partners have had to assume more responsibilities, potentially weakening the established social norms over the unequal distribution of domestic labor. Examples from history of “forced” changes in social norms are not lacking. The mobilization of men in Britain during World War One saw more women enter the labor market, filtering the norms and the preferences of the younger generations towards greater gender equality (Fara 2015), eventually setting the stage to Women’s Suffrage. Similarly, as men went off to serve in World War Two in the United States more women entered the labor market, challenging established social norms among the younger generations (Fernández et al. 2004; Fernández 2013). A long-term life-threatening stressor might, then, very reasonably, be viewed as a catalyst for adjusting couples’ personal life.

## ***2.2 Empirical evidence (so far)***

In the early stages of the pandemic in Europe, Alon et al. (2020) and Hupkau and Petrongolo (2020)—using survey data for the US and the UK—predicted that women would assume a greater share of household and childcare responsibilities due to the impossibility of using formal and informal childcare. Empirical studies have supported these initial predictions for the US, the UK, Germany, Spain, and Italy (Andrew et al. 2020; Del Boca et al. 2020; Farré et al. 2020; Sevilla & Smith 2020; Biroli et al. 2021). Nevertheless, these studies also suggested that a relevant proportion of fathers would be forced to increase their domestic contribution to care tasks (or even become primary caregivers), if necessary. For Spain, Farré et al. (2020) showed that, while men only slightly increased their household chores, the increase in childcare needs was fulfilled by both mothers and fathers. For the UK, Andrew et al. (2020) found that the substantial increase in childcare for both parents has, on average, increased fathers’ share of total childcare; this is explained by the fact that fathers’ contributions were much lower on average before the pandemic (Sevilla & Smith 2020). Similarly, and still for the UK, Hupkau and Petrongolo (2020) also documented a greater involvement of fathers in unpaid work activities. For Australia, Craig and Churchill (2020) pinpointed how the increases in care were greater for men than for women. In households with children, this narrowed, though it did not remove relative gender differences in care time. The same was not true of housework, which increased for both sexes, but there the same gender gap was preserved (Craig & Churchill 2020).

Although it remains to be seen what constitutes the short- and long-term in the still-unfolding pandemic, studies conducted in the midst of the emergency are portraying a rather “fluid” pattern. For instance, Rodríguez Sánchez et al. (2021), based on Understanding Society data for September 2020, suggested that after initial increases in gender equality at the onset of the pandemic, UK couples with children reverted to their pre-pandemic gender division of housework. However, couples without

children living at home divided their domestic labor more equally. Our study covers a longer time-horizon compared to Rodríguez Sánchez and colleagues' study, examining almost two years of the pandemic, encompassing additional months in which new waves and lockdowns hit Italy.

The consequences of the pandemic for the distribution of paid and unpaid work may be important for understanding its legacy for relationship quality. The majority of (mostly psychological) studies addressing Covid-19's effects have highlighted such negative intrapersonal outcomes as rising stress and anxiety (e.g., Luetke et al. 2020; Busetta et al. 2021; Ahuja & Khurana 2021; Eder et al. 2021)<sup>2</sup>. A recent study carried out with participants (N = 3,593) in long-term relationships (married, engaged, or dating) from 57 countries found that Covid-19 related stressors, such as social isolation, financial strain, and stress, were associated with poorer relationship quality (Balzarini et al. 2020). This (somewhat) monolithic narrative has been subsequently called into question by population-level studies (e.g., Schmid et al. 2021). Current research, indeed, suggests heterogeneous effects, with both worsening or improving relationship quality having been reported, depending on family composition and the gendered division of paid and unpaid work (Schmid et al. 2021; Bülow et al. 2021; Lim-Soh and Tan 2021). In India, participation in household chores, especially by men, was significantly related to spouses' relationship quality levels after the first-lockdown (Ahuja & Khurana 2021). This finding is in line with previous research suggesting that the proportion of male housework is positively related to spousal happiness (e.g., for Japan, Nakamura & Akiyoshi 2015) and union stability (e.g., for Italy, Mencarini & Vignoli 2018).

### **2.3 Research hypotheses**

Based on the theoretical premises outlined above, and the review of empirical findings, we pose a set of analytical hypotheses about how the pandemic might have affected relationship quality. We propose three main hypotheses; the first two identify theoretically opposite—and homogeneous—reactions, while the third hypothesis identifies a more probable intermediate effect.

*Hypothesis 1 – Negative shift.* Women have largely assumed the increased burden of domestic and care activities, widening the gender gap in the household division of labor (Calarco et al. 2021; Ruppner et al. 2020; Del Boca et al. 2020). This may have further strengthened preexisting gender inequalities regarding the division of labor, and consequently have weakened relationship quality.

*Hypothesis 2 – Positive shift.* Couples might, in the pandemic shock, have experienced a more balanced division of domestic labor, with an (initially forced) greater male participation (Mangiavacchi et al. 2021; see also Naujoks et al. 2021). Consequently, couples could have found a

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<sup>2</sup> There are, however, exceptions to this. Bülow et al. (2021), studying the first lockdown from March to May 2020 in the Netherlands, found significant differences between families, with some growing warmer and others facing more conflict.

new, more balanced equilibrium in the gendered division of labor, with an improvement in relationship quality.

The previous scenarios may not be mutually exclusive. Drawing on the gender revolution (Goldscheider et al. 2015) and the multiple equilibrium (Esping-Andersen & Billari 2015) frameworks, they can likely operate simultaneously depending on couples' characteristics. This is especially true of their gender ideology and the embrace of a new gender division of labor. We thus expect that the most probable situation is that of a *heterogeneous shift*; namely, that different equilibria in terms of couples' relationship quality will emerge out of the pandemic.

*Hypothesis 3 – Heterogeneous shift.* For more egalitarian couples, and those who have reached a more equal division of domestic work in the aftermath of the pandemic, there may be a new equilibrium, with a consequent improvement in relationship quality. For less gender equal couples, and those characterized by gendered domestic adjustments, the pandemic may have fostered an unstable equilibrium in their organizational sphere, with a consequent reduction in relationship quality.

### **3. Italy**

The research hypotheses outlined above will be tested in an Italian context. As with other European countries, the Covid-19 pandemic in Italy can be broken down into several subsequent waves: the first, from late February to the end of May 2020, saw a sharp increase in cases and deaths; a transitional phase, from June to mid-September 2020, saw a low diffusion of the virus; there was a second wave, from the end of September 2020; and a new transitional phase from January 2021 onwards, with new sub-national (i.e. regional) lockdowns with a differential severity according to the level of diffusion of the virus within localities and the number of vaccinated. The data used in this study were collected in September 2021, as Italy faced a new wave. In addition to the periods of strict lockdown measures, public employees as well as private workers were often instructed to work from home, with a different intensity depending on the severity of restrictions (Bonacini et al. 2021).

Italy is characterized by a rather “unstable equilibrium” (Esping-Andersen and Billari 2015), with women's employment being on the rise from the 1970s, coupled with a still very unequal gendered division of housework and childcare (Anxo et al. 2011; Dotti Sani & Treas 2016; Mencarini & Vignoli 2018). During the course of 2020, Brini et al. (2021) showed that Italian women's salaries contributed to shielding families from a loss of earnings, and concluded that they found no signs of the re-traditionalization of paid work among couples with dependent children. Importantly, the potential impact of job or income losses may have been mitigated by government interventions (Moreira et al 2020; Luppi et al. 2021). The Italian government was the first among European

countries to introduce a temporary suspension of dismissals for economic reasons in order to protect employment. Firms were authorized to use existing temporary lay-off and wage support schemes. (Limited) financial and fiscal support was provided to companies. In addition to actual economic disruptions, the pandemic has also created uncertainty regarding income, employment, and housing stability, which can threaten the ability to plan ahead (Vignoli et al. 2020; Guetto et al. 2021, 2022).

Initial evidence showed a shift toward a more equal distribution of household and childcare tasks between men and women during the first months of the pandemic (Del Boca et al 2020; Biroli et al 2021; Mangiavacchi et al 2021). A comparative analysis including Italy, the UK, and the USA confirmed these results (Biroli et al. 2020). However, as the crisis continued, most extra unpaid work fell to women (Meraviglia & Dudka 2020). This was due to, among other factors, an increase in women's childcare because of the longer school closures experienced by Italy compared to other countries (D'Ambrosio et al. 2020). Del Boca and colleagues (2021) found that, during the first two waves of the pandemic, even if working-from-home and non-working male partners spent more hours on family work, the increased time spent at home did not seem to lead to a substantial reallocation of couples' role-sets. However, to the best of our knowledge, ours is the first study to cover a longer time horizon.

This is also the first article to inspect whether (and how) gender ideology and the above-mentioned changes in the gender division of unpaid work were associated with changes in Italian couples' relationship quality in the advanced stage of the pandemic. Although living alone is often associated with relational vulnerability (Furfaro et al. 2021), couples have not been immune to the pandemic's effects on intimate relationships. The only study that has, to date, examined relationship quality in Italy using population-level data is Bellani and Vignoli (2021). They provided descriptive evidence for a non-negligible—though not large—proportion of respondents (12%) who reported worsening relationship quality during the lockdown (March 2020). Bellani and Vignoli's (2021) paper confined their examination to the *sole short-term negative effects* of the pandemic on relationship quality. However, as time passes, families who experience a short-term disequilibrium tend to adapt to the new reality by implementing new long-term strategies (Patterson 2002).

#### **4. Data and methods**

As for the data, we relied on *Familydemic*, which is a collaborative international project and a network of researchers (for details see Kurowska et al. 2022).<sup>3</sup> The focus of *Familydemic* is on the immediate and long-term consequences of policy responses to the Covid-19 outbreak for the distribution of paid

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<sup>3</sup> For more information about the *Familydemic* network and *Familydemic* survey please visit: <https://familydemic.wnpism.uw.edu.pl/familydemic-survey>

and unpaid work in relatively young couples and their labor market outcomes in diverse welfare regimes (Canada, Germany, Italy, Poland, Sweden and the US). For Italy, data were collected by imposing national quotas by age group, gender, education, macro region of residence, presence of children and age of the youngest child (N = 7,000). Quota sampling ensures that the final sample is virtually distributed as the country benchmark given by the statistics provided by the National Statistical Office on key sociodemographic factors. Additionally, we used post-stratification weights to adjust for small deviations from the benchmark population statistics. The analysis is based on respondents in heterosexual couples that have remained together since the pandemic outbreak. They were aged 20-59 at the time of the interview (N = 3,850).

The dependent variable is based on the question: “*Comparing the current situation (date of interview) with the month before Covid-19 (January 2020), the relationship with my partner: deteriorated a lot, somewhat deteriorated, did not change, somewhat improved, improved a lot.*” The variable has been coded in three categories contrasting a worsened vs. stable vs. improved relationship with the partner.

The main independent variables are the presence and age of children in the household, respondents’ gender ideology, and changes in the division of unpaid work between partners during the pandemic. To operationalize the presence and age of children we grouped the respondents into the following categories: Childless couples; couples with a youngest child aged less than six; couples with a youngest child aged more than five and less than 12; and couples with a youngest child aged more than 11.

To operationalize the gender ideology of the respondent, we combined the answers to two standard questions related to the roles of mothers and fathers, used in many cross-national surveys: “*In general, fathers are as well suited to look after their children as mothers*” and “*Mothers should be as responsible for financially supporting their families as fathers.*” The possible answers follow a five-point Likert scale about how much respondents agree on these statements. We built an index of gender ideology, ranging from 0 to 9, by summing up the answers to these two questions. Gender ideology – as values and attitudes in general – does not change suddenly; this is why data have been collected regarding the level, and not regarding changes during the pandemic.

To operationalize couples’ shifts in unpaid work, we considered what the respondent reported about the couple’s division of unpaid work during the pre-pandemic time (retrospectively) and at the time of the interview. The variable takes value 0 if both partners spend less time in unpaid work at the time of the interview compared to the pre-pandemic period (January 2020); value 1 if both spend the same amount of time; value 2 if both spend more time; value 3 if the respondent spends more time (and the partner spends less or equal time); finally, value 4 if the respondent spends less time (and

the partner spends more or equal time). The variable only includes housework chores (e.g. food purchasing, cooking, cleaning, doing the laundry), and not childcare tasks. The reason for this is twofold. First, including childcare would force us to only select couples with children in the household. Second, there is a high degree of overlap between (changes in) partners' division of housework and childcare.<sup>4</sup> Thus, on the one hand, disentangling the net contribution of each variable to changes in relationship satisfaction is empirically difficult; on the other, the variable concerning (changes in) the division of housework also captures a substantial part of the higher (and increasing) burden of unpaid work due to the presence of children.

All models also contain a common set of control variables, including respondent's and partner's age (in their linear and squared functions); their level of education (compulsory, upper secondary, tertiary); partnership status (cohabiting or married couples); immigrant status (immigrant or native); area of residence (North-East, North-West, Centre, South); the employment condition of the respondent and of her/his partner before the pandemic (whether she/he was employed or not); a variable for couples' shifts in paid work which takes value 0 if no partners lost the job during the pandemic (prior to the interview); value 1 if one partner lost the job; value 2 if both lost their jobs.

A crucial additional control variable included in all models is the level of partnership quality at the time of the interview, measured on a scale from 1 to 10. People who were highly satisfied with their relationships before the Covid-19 pandemic are also likely to report higher relationship quality during the early and later stages of the pandemic, irrespective of their gender ideology and any shifts in the division of unpaid work within the couple. However, those who were highly satisfied with their relationship (e.g. those who scored 9 or 10) before the pandemic were "structurally" more likely to experience stronger declines in relationship quality after the onset of the pandemic. For these reasons, our estimates of the effects of the presence and age of children, gender ideology, and shifts in unpaid work on changes in relationship quality are controlled against the level of relationship quality at interview.

Descriptive statistics regarding all variables included in the model are reported in the Appendix, **Table A1**. In the following, we first present descriptive results on changes in relationship satisfaction following the onset of the pandemic. We then present results from two multinomial logistic regression models, to test the effects of our main independent variables net of the control variables. In a first model, we analyze how changes in relationship satisfaction are influenced by the presence and age of children in the household. In a second model, we test whether respondents' gender ideology moderates the effect of the presence and age of children, and we analyze how shifts

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<sup>4</sup> In our analytical sample, the percentages of respondents who reported spending the same amount of time for both housework and childcare, before the pandemic and at interview, and to have increased the time spent in both activities are, respectively, 81% and 84%. Overall, we found a 70% correspondence between the two variables.

in the division of unpaid work due to the pandemic influenced changes in relationship satisfaction. Both descriptive and multivariable analyses are performed separately for men and women.

## 5. Results

### 5.1 Descriptive findings

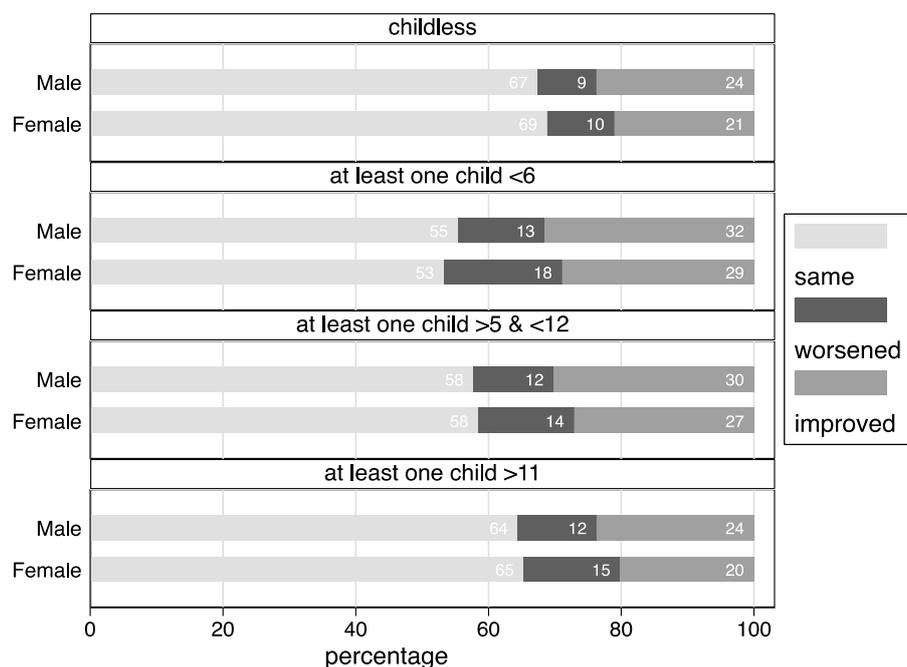
We note a non-negligible share (12%) of couples who experienced a worsening in their relationship satisfaction between January 2020 and September 2021. This share is slightly higher for women compared to men, being, respectively, 14% and 11%. Interestingly, this result closely resembles the one obtained by Bellani and Vignoli (2021), who found a 12% proportion of respondents who reported worsening relationship quality during the first lockdown (March 2020). At the same time, an important, and larger, share of population also experienced an improvement in relationship satisfaction. 25% of couples, in fact, declared that their relationship quality improved during the pandemic. This finding might be partly due to the fact that we condition our description to “intact couples”: non-resilient couples could not have survived until September 2021, and this is especially true of cohabiting couples.<sup>5</sup>

Against these relatively optimistic findings, we also note a substantial minority of men and women who reported a worsening of relationship quality during the pandemic. Looking at the results by parenthood status, we find that respondents with children are those for whom relationship satisfaction worsened the most (**Figure 1**). This is not surprising as parents needed to balance competing demands to fulfill possible work-related responsibilities and enhanced housework duties. This state of affairs seems to have primarily affected women with pre-school children, who experienced the larger drop in relationship quality (18%). However, a substantial share of parents with children aged younger than 12 also experienced improvements in relationship quality (approximately 30% among both men and women). Hence, among couples with young children we see more variation than among childless couples, whose figures are similar to couples with children older than 11 years of age.

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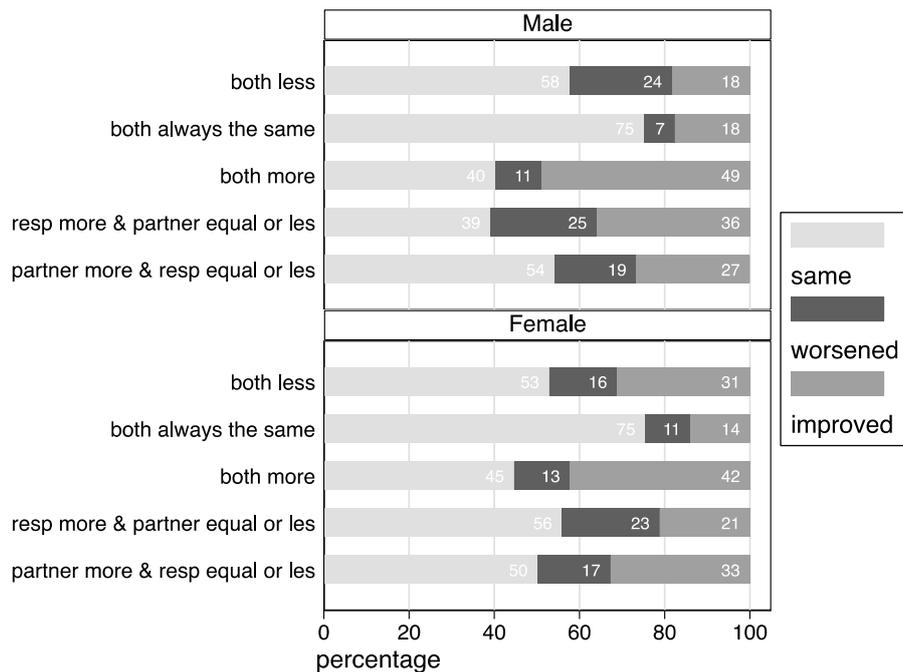
<sup>5</sup> The number of cases involved, however, should not be too large. In fact, in our data we detected 154 cases who either had a partner in January 2020 but were single in September 2021 or who found a new partner. In the latter case, we cannot study changes in relationship satisfaction as this question was asked only for those who remained within the same relationship.

**Figure 1** – *Change in relationship satisfaction by gender and presence and age of children; Jan 2020-Sept 2021*



An important subsequent question is whether those who were more open to re-allocate the division of unpaid work during the pandemic also experienced more positive shifts in relationship satisfaction. During the pandemic, 48% of couples experienced changes in their allocation of unpaid work, with 20% of the respondents declaring that both partners spent more time in domestic tasks, with no differences by gender (Table A1 in the Appendix). However, while 19% of men reported that at least one partner spent more time in unpaid work tasks, the same figure rises to 24% among women. The difference is due to the higher share of women (16%) who reported to have increased their relative contribution to unpaid work compared to their male counterparts (10%). **Figure 2** shows that 42% of women and 49% of men who reported that both they and their partners increased the amount of unpaid work improved their relationship satisfaction. Apart from those who reported no changes in the division of unpaid work—three quarters of whom consistently reported no changes also in relationship satisfaction—the percentage of respondents who improved their relationship satisfaction is substantially lower in case of unequal shifts in unpaid work. This is especially true among women who reported an increase in their relative share of unpaid work: only 21% of them increased their relationship satisfaction, whereas 23% declared a negative change. On the other hand, an increase in their male partners’ relative participation in unpaid work was more frequently linked to an improved and less likely to a worsened relationship: respectively 33% and 17%. Interestingly, among men, changes in relationship satisfaction following unequal shifts in unpaid work are more ambiguous. In fact, an increase in his relative share of unpaid work is associated with both improved (36%) and worsened (25%) relationship satisfaction.

**Figure 2** – *Change in relationship satisfaction by gender and partners’ shift in unpaid work; Jan 2020-Sept 2021*



In sum, results suggest that an important number of couples were able to adapt to the Covid-19 crisis by increasing their level of commitment to unpaid work and more equally sharing household tasks—especially among those couples where the man’s relative contribution increased. However, for many couples, family relationships substantially worsened: this was especially so among those where women took charge of the largest part of the increased household tasks. These first descriptive results are, thus, in line with hypothesis 3 and the existence of multiple equilibria.

### 5.2 Multivariable findings

We present the results of multivariable models focusing on our main independent variables, i.e. presence and age of children, gender ideology, and shifts in couples’ division of unpaid work. Full model results are reported in the Appendix, **Table A2**<sup>6</sup>. To facilitate interpretation, the findings are presented in the form of predicted probabilities.

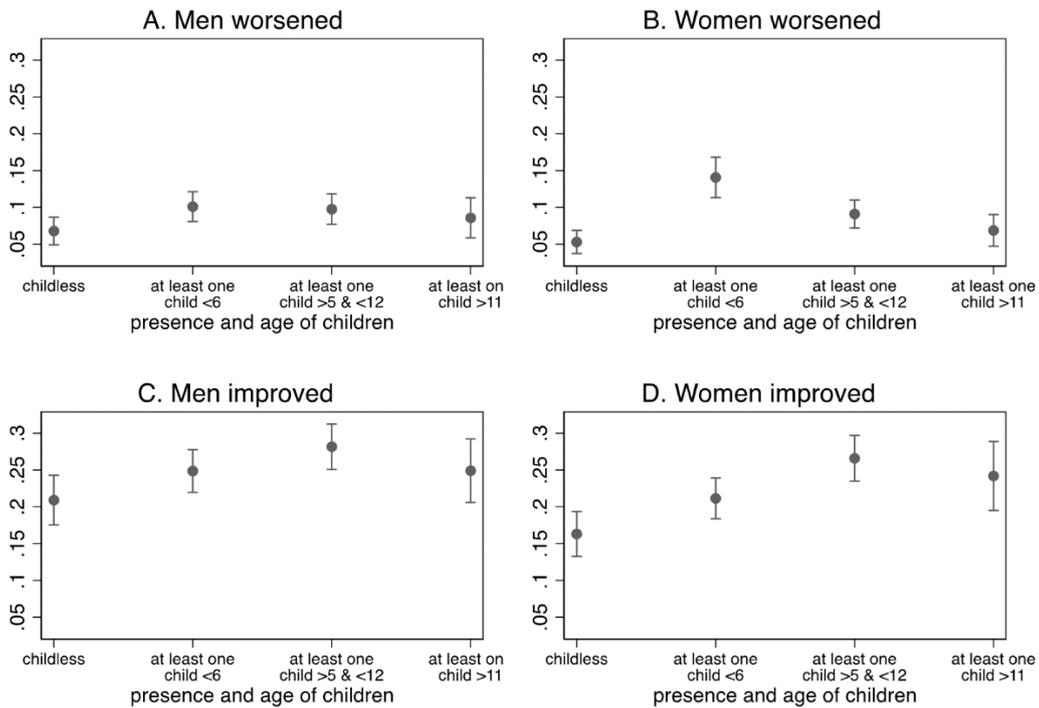
**Figure 3** suggests that, net of several confounders inserted in the model equation, including the actual level of relationship quality, couples with children are those who are more likely to have experienced a worsening in relationship quality. This is especially the case for women with pre-school children. They are almost ten percentage points more likely to see a worsening in relationship satisfaction compared to childless women. But, at the same time, there are also more likely to have

<sup>6</sup> Commenting on the results relative to all the confounders in a detailed way is beyond the scope of this paper; nonetheless, they are in line with prior research, providing us with an indirect validation of the model itself.

been improvements, among both men and women with pre-school children. This is consistent with the descriptive finding that couples with small children show a high degree of heterogeneity in their responses to the pandemic emergency.

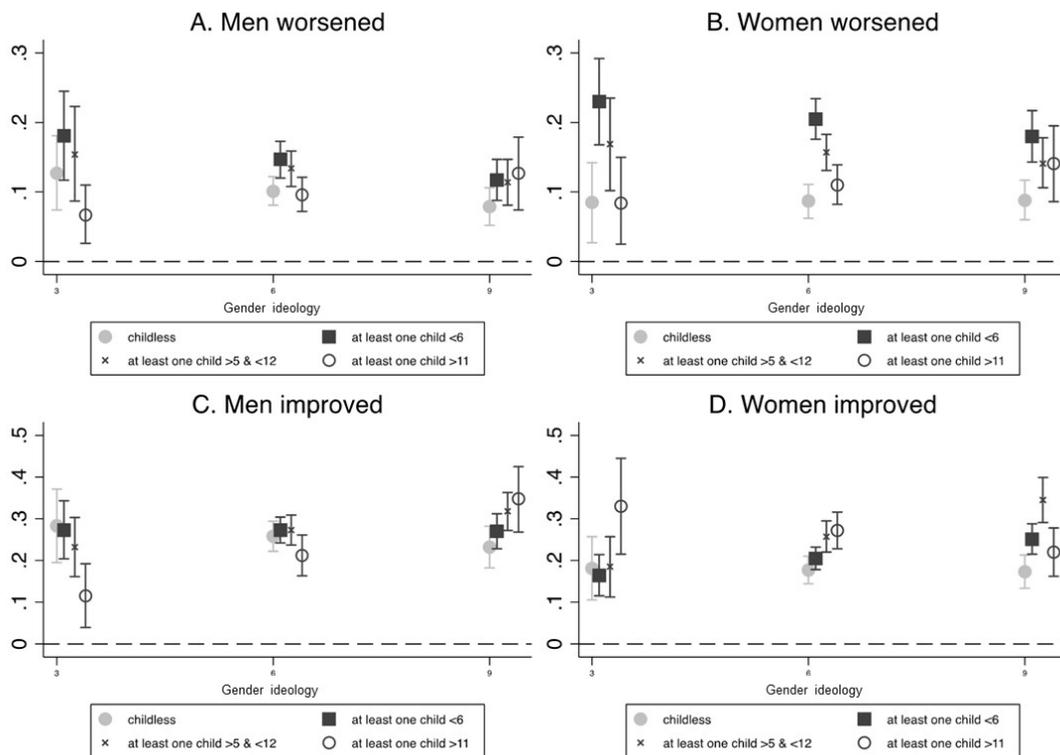
According to our hypothesis 3, differences among the gender ideology of couples and couples' shifts in unpaid work may account for these heterogeneous outcomes. **Figure 4** explores how the level of (the respondent's) gender ideology influences changes in relationship satisfaction and moderates the effect of the presence and the age of children. The top-right panel shows that among women with more "traditional" gender ideologies (scoring three on the index from 0 to 9), those with a pre-school child (square symbol) are approximately 15 percentage points more likely to have experienced a worsening of relationship satisfaction compared to: those with no children (grey circle); or those with a youngest child older than 11 (empty circle). Differences based on the presence of children and the age of the youngest child are much smaller when focusing on women with more equal gender attitudes (scoring 9 on our index). In this case, differences in the chances of having experienced a negative change in relationship satisfaction between women with a pre-school child and women with a child older than 11 become virtually null. The same pattern of results, although in a slightly muted form, is confirmed even among men (top-left panel). The bottom panels of Figure 4 show the combined effects of the presence and age of children and gender ideology on the chances of having experienced an improvement in relationship satisfaction. Women with children aged less than 12 are characterized by substantial increases in the predicted probability of experiencing an improvement in relationship satisfaction as they move from less to more equal gender ideals. For instance, among women with a child aged between six and 11 (X symbols), the probability of experiencing an improvement in relationship satisfaction jumps from 20% to 35%, whereas among those with a pre-school child it jumps from 15% to 25%. Results are similar for men, but differences by level of gender ideology are substantially relevant only among fathers of children aged older than 11 (empty circle in the bottom-left panel). There the probability of improved relationship satisfaction jumps from 10% to 30%.

**Figure 3** – Predicted probabilities of worsening and improving relationship satisfaction by gender and presence and age of children; January 2020-September 2021



Models include: respondent's and partner's age (linear and squared); level of education; partnership status; immigrant status; area of residence; actual level of relationship satisfaction; respondent's and partner's pre-pandemic employment status; shifts in paid work.

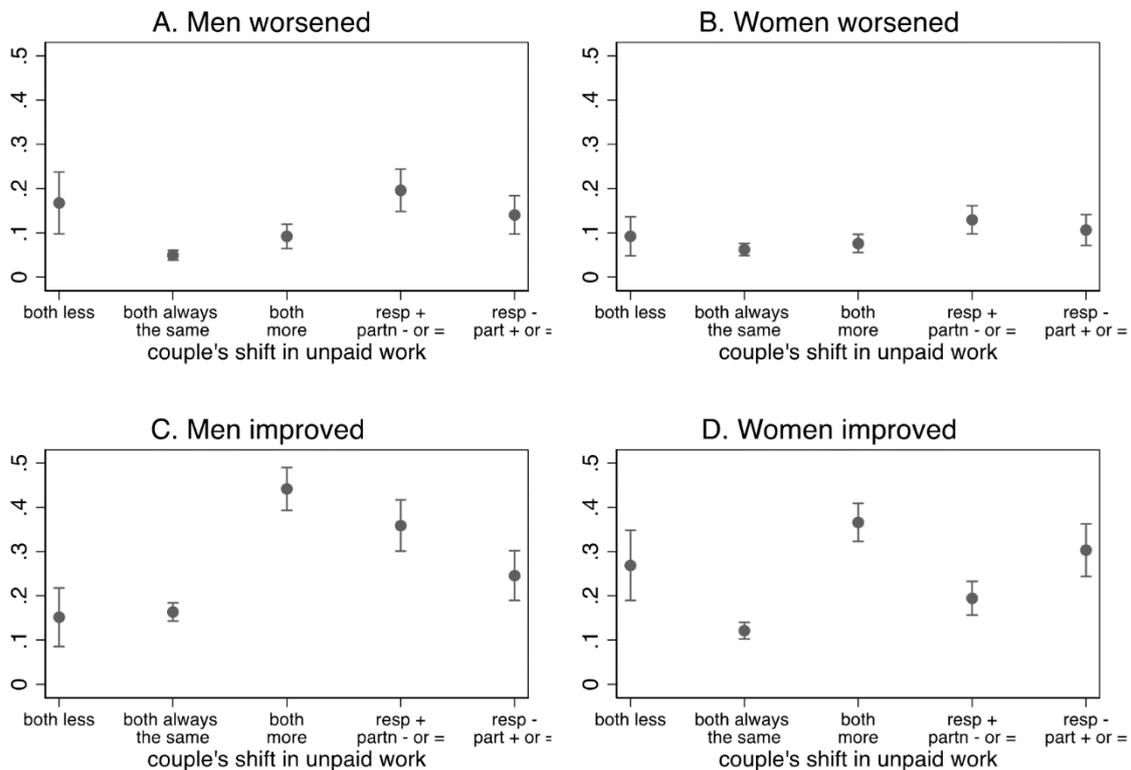
**Figure 4** – Predicted probabilities of worsening and improving relationship satisfaction by gender, presence and age of children, and gender ideology; Jan 2020-Sept 2021.



Models include same controls as in Figure 3, with the addition of couple's shifts in unpaid work.

Interesting findings emerge when looking at changes in relationship quality by partners' shifts in unpaid work division, net of gender ideology and net of the presence and age of children (**Figure 5**). The key finding here confirms the descriptive figures discussed above controlling for compositional factors. There is a significant and sizable improvement in relationship satisfaction among couples in which the female partner devotes less time to unpaid work and the male partner devotes more time, compared to the pre-pandemic period. Focusing on positive changes in relationship satisfaction, among women (bottom-right panel) the probability jumps from 20% when she increased her relative share of unpaid work to 31% if he increased his relative contribution to domestic tasks. Among male respondents (bottom-left panel) the result is symmetrical as the probability of having improved relationship satisfaction increases by 12 percentage points if he increased his share of domestic tasks (36%) compared to his partner doing so (24%). However, the combination associated with the highest improvement in relationship satisfaction, among both female and male respondents, is the one in which both partners increased the amount of time devoted to unpaid work. Overall, these results suggest that relationship satisfaction improved for both partners in those couples where unpaid work division adjustments following the Covid-19 pandemic meant a more balanced division of tasks. This was, above all, due to an increased contribution by the male partner. In the case of negative changes in relationship satisfaction (top panels) differences based on partners' shifts in unpaid work are substantially less relevant, especially among women. Results indicate a slightly higher likelihood of reporting a worsening level of satisfaction for respondents who increased their relative share of unpaid work, or when both partners reduced their level of participation, notwithstanding the Covid-induced increase in housework duties. This could signal a decline in partners' commitment to their relationship.

**Figure 5** – Predicted probabilities of worsening and improving relationship satisfaction by gender and couples' shift in unpaid work; Jan 2020-Sept 2021



Models include same controls as in Figure 3, with the addition of presence and age of children, and gender ideology.

### 5.3 A critical account of the dependent variable

Some drawbacks of our study need to be drawn out. Our dependent variable is a self-reported measure of relationship quality constructed by comparing the perceived level prior to the pandemic (January 2020) with that of its advanced stage (September 2021). This measure might be subject to various sources of bias, such as social desirability, recall, or others (e.g., ex-post rationalization to reduce cognitive dissonance). Nonetheless, self-reported online survey data are a valid and well-established data collection method able to pinpoint variations in sensitive behaviors (Burkill et al. 2016).

An additional key objection to our study—still linked to the nature of our dependent variable—might be that we are simply noting a general change in relationship quality over time; as opposed to these changes being a result of Covid-19. To address this question, we recall the well-established finding—proposed in both qualitative (Bradbury et al. 2000) and quantitative (Proulx et al. 2007) literature reviews—that relationship satisfaction tends to, on average, decline with the duration of the relationship (Karney & Bradbury 1995; Kurdek 1999; Umberson et al. 2005; Kamp Dush & Taylor 2012). Marital satisfaction, in particular, following on from an initial “honeymoon period”, declines after a few years of marriage (Glenn 1998). However, in our study we have found an overall improvement in relationship satisfaction. This might be explained by the selection of couples who

were still together at the end of the pandemic. However, the degree of variation in relationship quality found in our data over such a short time span (18 months of the pandemic) is far higher than what is usually found in existing studies (e.g., Umberson et al. 2005). Hence, our results conflate with this prior evidence, suggesting that the patterns we found should not be seen as a background process, but rather something that has been shaped by the current pandemic.

In addition to these considerations, we conducted an empirical exercise (results available upon request but not shown here for reasons of space) that consisted in replicating our analyses using general satisfaction with life (instead of relationship satisfaction) as the dependent variable. In fact, one might argue that changes in relationship satisfaction are driven by underlying changes in overall life satisfaction. In fact, models produced similar findings, but the magnitude of the estimated effects of our main independent variables turned out to be weaker. Whereas, more generally, positive changes in relationship quality were more numerous than negative changes (25% vs. 12%), the same does not hold for life satisfaction, which declined for 21% of the respondents in our analytical sample, and improved for 22% of them. Thus, although the level of relationship quality represents an important component of life satisfaction as a whole (Aassve et al. 2020), the pandemic affected life and relationship satisfaction in a different way. This suggests a specific impact on partnership dynamics.

## **6. Concluding discussion**

There has been a plethora of published articles about Covid-19-related relationship conflict in the aftermath of the emergency. But these studies have predominantly used *ad-hoc* convenience (and real-time) samples. There is, thus, a need for population-based evidence on the factors associated with changes in partnership quality during the pandemic. Moreover, relationship quality must be examined in the later stages of the pandemic so as to more deeply understand its effects on family life. To the best of our knowledge, no study has assessed the variation in relationship quality based on couples' gender ideology and adjustments in the gender division of unpaid work in the advanced stages of the pandemic (at least in Italy). While recent studies focusing on Italy have concentrated on the pandemic's consequences on the reallocation of unpaid work (Del Boca 2020, 2021; Mangiavacchi et al. 2020), this study takes the further step of investigating how these changes affected couples' relationship quality after 18 months of the pandemic.

We have not found a “fatal effect” for Covid-19 on Italian couples. By September 2021, improved relationships outnumbered those that worsened. This highlights how an important share of families was able to adapt to the “new normal” and to take advantage of the increased family time it offered (Cockayne 2021; Halford 2006). These improvements were likely facilitated by schools reopening, and the lifting of social and travel restrictions, thus allowing grandparents (or other

relatives) to provide childcare. With this study, we therefore reject the narrative of a simple, uniform, and unidirectional negative effect of the pandemic on relationship quality. Further, we contest the idea that all families experienced negative adjustments following the pandemic. In line with recent research (e.g., Hank & Steinbach 2021; Smitch et al. 2021; Eder et al. 2021), we found a great level of heterogeneity in responses, and great variation in family re-arrangements and relationship satisfaction following the pandemic. The Covid-19 disaster represented an exogenous engine for family reshuffling, especially when relatively young children are involved. The current crisis seems to have amplified differences among couples. It clustered them into distinctly different trajectories depending on their different entry points in their gender attitudes and gender division of labor.

The high heterogeneity in couples' responses to the pandemic can be interpreted through the lenses of recent theoretical approaches such as the Gender Revolution (Goldscheider et al. 2015) and the Multiple Equilibrium framework (Esping-Andersen & Billari 2015). For less egalitarian couples, especially those with small children in the household, the pandemic has led to negative adjustments, further fostering unstable equilibria in their organizational sphere and negative consequences for relationship quality. In this case, the pandemic has further raised preexisting gender inequalities in the division of domestic tasks, favoring relationship dissatisfaction. Unfairness in the division of unpaid work is associated with greater conflict even under ordinary circumstances (e.g. Newkirk et al. 2017; Pietromonaco & Overall 2020; Pietromonaco et al. 2021). Conversely, for other couples—mostly those with egalitarian gender-role attitudes—the “*forced experiment on gender equality*” (Alon et al. 2020: 24) has instead allowed for a new equilibrium, with a more balanced allocation of domestic tasks, and higher levels of relationship quality.

This study also contributes to the recent literature on the re-allocation of domestic roles in Italy. The econometric study by Mangiavacchi et al. (2020) observed a substantial increase in Italian fathers' involvement in childcare: though Del Boca et al. (2020, 2021) found that most of the additional household workload due to the Covid-19 crisis has fallen to women. This shift in gender roles is particularly interesting in Italy, a society characterized by fathers' very low involvement in childrearing (Mencarini & Vignoli 2018). We advance the literature by further illustrating how gender attitudes and adjustments to domestic tasks during the 18 months following the onset of the emergency have affected both gains and losses in relationship quality. The generalizability of the results to other contexts with different levels of gender (in)equality in the division of household labor offers a promising path for future studies.

This study has several limitations in addition to those regarding the study's dependent variable. First, the results may not generalize to the whole population as the data are based on an online survey, which can only target the population with an internet connection and participating in

the online panel. However, online data collection represents the safest and most feasible collection method during a pandemic. Additionally, by quota sampling and post-stratification weights, we made the sample representative of the national population with respect to key sociodemographic variables. Second, given the need to keep the questionnaire as concise as possible for our online survey (Revilla & Ochoa 2017), as well as budget limitations, we were unable to ask all of the questions we wished to. This included more detailed questions regarding housing conditions and other couples' relationship dynamics. The small-scale sample also meant that a finer-grain investigation of a combination of paid and unpaid work—which is certainly important—was not credible (Neyer et al. 2013). Third, the study design cannot explain causation; the associations between adjustments in couples' role-sets and relationship satisfaction should not, of course, be interpreted solely as “the consequences” of the pandemic. It is possible that gender equality would have changed in the absence of the pandemic (even if this would be quite improbable in the studied context), or due to other uncontrolled factors. Moreover, we only contrasted January 2020 and September 2021, without more closely examining the changes in relationship satisfaction across the pandemic's trajectory (see Rodríguez Sánchez et al. 2021). Lastly, our data did not include information about the duration of each relationship. Nonetheless, our focus on young couples and the statistical accounting for respondents' age profile should mean that these information gaps matter less.

Despite these limitations, our findings offer novel and timely evidence on the pandemic-gender roles adjustments-relationship quality nexus. We propose that the pandemic has, as a sort of forced social experiment, created a huge amount of variation in family life. Covid-19, lockdown orders, and related economic consequences substantially influenced family life, and have had a collateral effect on relationship quality. When there were children, roughly 45–50% of couples experienced some changes in their relationship satisfaction. Couples have tried to adapt to the new reality, with some experiencing gains in relationship quality, and others losses. Gender ideology and the division of unpaid work between partners seem to play a crucial role in moderating this adaptation process: where the gender context was more favorable to equality of roles between partners, and where partners effectively adjusted to the new reality with a more balanced share of domestic tasks, couples did not necessarily appear as the “losers of the pandemic”.

Our study is one of an increasing number being published on this topic. We contribute to this growing body of research with a distinct message: gender-equality attitudes and men's adjustments in unpaid work during the contemporary pandemic represent factors that strengthen relationships, and that may set the stage to re-thinking couples' role-sets in a post-Covid-19 world. As advocated by Hupkau and Petrongolo (2020), there are prior research examples that show how “forced” changes in

gender roles have both short- and long-term implications. Will these changes last, facilitating a more general shift in social norms with enhanced levels of relationship quality?

## Appendix

**Table A1 – Descriptive statistics**

Variable	Men		Women	
	Mean/%	Std. Dev.	Mean/%	Std. Dev.
<b>Age</b>	44.978	9.187	42.553	9.401
<b>Partner's age</b>	42.581	9.601	45.729	10.055
<b>Educational level</b>				
Up to lower secondary	31.91		38.07	
Upper secondary	42.64		41.74	
Tertiary	25.45		20.19	
<b>Partner's educational level</b>				
Up to lower secondary	27.23		37.69	
Upper secondary	42.52		42.19	
Tertiary	30.24		20.12	
<b>Married</b>				
No (cohabiting)	25.33		30.39	
Yes	74.67		69.61	
<b>Migration status</b>				
Not migrant	97.30		93.52	
Migrant	2.70		6.48	
<b>Area</b>				
Nord Ovest	26.97		28.52	
Nord Est	19.77		20.61	
Centro	23.01		20.93	
Sud e Isole	30.26		29.94	
<b>Marital quality at the time of interview</b>				
Low	17.11		20.32	
Medium	4.38		6.00	
High	78.51		73.69	
<b>Family composition</b>				
Childless	37.02		33.10	
Youngest child aged <6	23.62		26.22	
Youngest child >5 & < 12	20.07		20.17	
Youngest child >11	19.29		20.52	
<b>Couple job loss</b>				
no lost	94.57		95.76	
At least one partner lost job	5.43		4.24	
<b>Pre pandemic work condition</b>				
Not Working	6.18		34.62	
Working	93.82		65.38	
<b>Pre pandemic work condition, partner</b>				
Not Working	32.54		11.87	
Working	67.46		88.13	
<b>Gender egalitarianism</b>				
1 (min)	0.21		0.06	
2	0.24		0.19	
3	1.40		0.97	
4	3.06		3.14	
5	12.99		12.82	
6	16.64		13.39	
7	34.22		36.88	
8	12.82		11.17	
9 (max)	18.34		21.37	
<b>Couple shift in unpaid work</b>				
Both less	3.15		5.02	
Both always the same	58.41		50.09	
Both more	19.55		20.43	
Resp more & partner equal or less	9.65		15.81	
Partner more & resp equal or less	9.25		8.66	

**Table A2** – *Correlates of worsening and improving relationship satisfaction by gender and couples' shift in unpaid work; Jan 2020-Sept 2021. Full model results*

	(M1) Men	(M2) Women	(M3) Men	(M4) Women
<b><i>Marital quality worsened</i></b>				
Age	-.185* (.101)	-.314** (.123)	-.241** (.104)	-.299** (.136)
Age squared	.002* (.001)	.004** (.001)	.003** (.001)	.004** (.002)
Partner's age	.075 (.059)	.072 (.094)	.114* (.064)	.054 (.110)
Partner's age squared	-.001 (.001)	-.001 (.001)	-.001 (.001)	0.000 (.001)
Educational level, ref: up to lower secondary				
Upper secondary	.054 (.368)	.468* (.257)	-.123 (.385)	.500* (.261)
Tertiary	.525 (.409)	.633** (.306)	.382 (.420)	.609* (.324)
Partner's educational level, ref: up to lower secondary				
Upper secondary	-.154 (.376)	-.437* (.254)	-.109 (.391)	-.438* (.256)
Tertiary	.022 (.419)	-.322 (.309)	.062 (.423)	-.296 (.325)
Married	-.269 (.204)	-.035 (.184)	-.346 (.220)	.013 (.193)
Migrant	-.109 (.565)	-.323 (.377)	.360 (.474)	-.362 (.399)
Area of residence, ref: North-West				
North-East	-.129 (.259)	.017 (.228)	-.023 (.275)	.125 (.233)
Centre	.330 (.234)	-.317 (.222)	.399 (.246)	-.179 (.233)
South	-.235 (.245)	-.085 (.216)	-.179 (.252)	-.028 (.225)
Marital quality at the time of interview, ref: medium				
Low	1.78*** (.332)	1.257*** (.278)	1.906*** (.334)	1.238*** (.288)
High	-1.171*** (.187)	-1.669*** (.171)	-1.228*** (.202)	-1.727*** (.179)
Family composition*gender egalitarianism				
Youngest child aged <6	.502** (.249)	1.168*** (.249)	.479 (1.025)	1.329 (1.142)
Youngest child >5 & < 12	.514** (.249)	.738*** (.247)	.015 (1.139)	.716 (1.24)
Youngest child >11	.315 (.277)	.389 (.286)	-1.914 (1.295)	-.438 (1.544)
Gender egalitarianism			-.112 (.114)	-.015 (.135)
Youngest child aged <6* gender egalitarianism			.010 (.146)	-.019 (.156)
Youngest child >5 & < 12* gender egalitarianism			.074 (.163)	.019 (.171)
Youngest child >11* gender egalitarianism			.311* (.189)	.143 (.216)

Couple\_shift\_unpaid, ref: both less

Both always the same			-1.368***	-.639
			(.386)	(.401)
Both more			-.219	-.06
			(.412)	(.418)
Resp more & partner equal or less			.583	.281
			(.426)	(.415)
Partner more & resp equal or less			-.074	.222
			(.436)	(.458)
Pre pandemic work condition, partner, ref: not working				
Working	.074	.208	.155	.262
	(.202)	(.245)	(.211)	(.264)
Constant	1.670	3.222	3.338	3.376
	(1.926)	(1.875)	(2.116)	(2.375)
<b><i>Marital quality improved</i></b>				
Age	-.099	-.156**	-.101	-.109
	(.069)	(.079)	(.081)	(.083)
Age squared	.001	.001	.001	.001
	(.001)	(.001)	(.001)	(.001)
Partner's age	-.092*	-.022	-.063	-.075
	(.047)	(.056)	(.056)	(.058)
Partner's age squared	.001**	.000	.001	.001
	(.000)	(.001)	(.001)	(.001)
Educational level, ref: up to lower secondary				
Upper secondary	.288	-.451**	.141	-.534**
	(.226)	(.209)	(.237)	(.234)
Tertiary	.262	-.537*	.262	-.688**
	(.265)	(.276)	(.287)	(.304)
Partner's educational level, ref: up to lower secondary				
Upper secondary	-.454*	.141	-.429*	.151
	(.24)	(.206)	(.246)	(.232)
Tertiary	-.316	.592**	-.379	.597**
	(.271)	(.274)	(.292)	(.300)
Married	-.057	-.146	-.037	-.048
	(.153)	(.145)	(.166)	(.154)
Migrant	.023	.398*	.113	.371
	(.356)	(.239)	(.373)	(.256)
Area of residence, ref: North-West				
North-East	-.011	.029	.062	.159
	(.179)	(.178)	(.192)	(.188)
Centre	.238	-.048	.132	-.049
	(.167)	(.182)	(.175)	(.194)
South	.197	.209	.047	.112
	(.163)	(.16)	(.175)	(.171)
Marital quality at the time of interview, ref: medium				
Low	1.240***	.534	1.311***	.531
	(.383)	(.359)	(.395)	(.364)
High	.498***	.729***	.408**	.749***
	(.174)	(.186)	(.186)	(.209)
Family composition, ref: childless				
Youngest child aged <6	.279	.45**	-.170	-.277

	(.172)	(.186)	(.774)	(.863)
Youngest child >5 & < 12	.450***	.686***	-.632	-.513
	(.174)	(.188)	(.8)	(.964)
Youngest child >11	.258	.522**	-2.569**	.991
	(.204)	(.217)	(1.11)	(1.077)
Gender egalitarianism			-.068	-.007
Youngest child aged <6* gender egalitarianism			.055	.103
			(.109)	(.116)
Youngest child >5 & < 12* gender egalitarianism			.133	.177
			(.111)	(.131)
Youngest child >11* gender egalitarianism			.371**	-.066
			(.153)	(.151)
Couple_shift_unpaid, ref: both less				
Both always the same			-.070	-1.042***
			(.390)	(.311)
Both more			1.449***	.445
			(.401)	(.314)
Resp more & partner equal or less			1.287***	-.381
			(.424)	(.331)
Partner more & resp equal or less			.586	.201
			(.432)	(.355)
Couple job loss, ref: none lost job				
At least one partner lost job	.211	.633**	.156	.495
	(.248)	(.304)	(.274)	(.352)
Pre pandemic work condition, respondent, ref: not working				
Working	.576**	.383**	.537*	.351**
	(.284)	(.149)	(.292)	(.159)
Pre pandemic work condition, partner, ref: not working				
Working	.145	-.163	.082	-.125
	(.135)	(.204)	(.145)	(.227)
Constant	2.699	2.599	2.380	2.946*
	(1.292)	(1.293)	(1.596)	(1.613)
Observations	1905	1959	1838	1892
Pseudo R <sup>2</sup>	.083	.120	.147	.164

Standard errors are in parentheses; \*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

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