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IMPACTS OF COVID-19 ON WORK-FAMILY ARRANGEMENTS IN SOUTH KOREA: EMPIRICAL FINDINGS AND POLICY IMPLICATIONS

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1. INTRODUCTION

COVID-19 pandemic has made the importance of care abundantly clear and highlighted the pre-existing, multidimensional, and intersecting inequalities along gender, race/ethnicity, and class lines that are delineated by carework. However, despite increased societal awareness about these inequalities, very little seems to have changed. Across the globe, women continue to take on most paid and unpaid carework within the family, in communities, and in the labour market. In some cases, the pandemic has not only exposed deep-seated gender inequality, but exacerbated it. Recent studies of the pandemic's impacts on families in North America and Europe show that pandemic lockdowns and/or school closures have resulted in increased unpaid childcare hours and intensities and childcarerelated stress for parents, and that these impacts have disproportionately affected mothers more than fathers (Adam-Prassl et.al. 2020; Seville and Smith, 2020; Statistics Canada, 2020; Leclerc, 2020). For those caring for older people or people with disabilities, pandemic lockdowns have increased families' unpaid care burden, and the research shows that much of this added care burden has fallen onto women (Carers UK, 2020). UN Women's global assessment of unpaid care and domestic work reveals that across the globe both women and men have increased and intensified their unpaid care and domestic work since the onset of the COVID-19, but that when compared women are doing far more caring than men. It concludes that this setback will not only undermine any progress made in sustainable social and economic developments, but that it will also likely lead to adverse physical, mental, and socio-economic outcomes for women (UN Women, 2020).

South Korea (hereafter Korea) is considered one of the more successful countries in managing COVID-19 spread and flattening the curve owing to its policies on early detection, containment, and treatment. Partly because of this, unlike many countries in the West, the Korean government did not impose a full lockdown measure; instead, it imposed a series of varying "social distancing" measures where schools and childcare centres were closed but most businesses remained open. While many public sector and large firm workers were able to work from home on either full- or part-time bases, those working in small and medium-sized enterprises (SMEs) had fewer options and most continued going to work. Due to school and daycare closures, many parents were therefore forced to improvise ways to manage work and childcare, including using statutory unpaid family care leave and annual holidays time to work from home. Failing that, they reduced their working hours in order to manage childcare. The first social distancing period lasted from March to May 2020. Despite its relatively short period, this social distancing measure nevertheless had significant impacts on families, and particularly on mothers with small children.

In June 2020, we conducted a national survey to assess the impacts of Korea's first COVID-19 social distancing measure on working parents' work-family balance, childcare arrangements, and wellbeing. We surveyed a sample of 1,252 households consisting of parents with at least one child aged 0 to 12. Our survey shows that the social distancing

measure significantly affected these families economically and psychologically; however, the impacts were different for men and women. We found that: 1) fathers were more likely to take short periods of leave from the workplace to work at home, while mothers spent longer periods of time working from home; 2) mothers were more likely to experience difficulties managing work and childcare responsibilities while working from home; and 3) work-care conflict has led a significant proportion of mothers to quit or consider quitting their jobs, whereas only a few fathers considered quitting their jobs and almost none quit for childcare-related reasons. Our findings contribute to a growing literature on the impacts of the COVID-19 on families. Our analysis highlights not only the pandemic's unequal gender impacts, but also how gender inequality within and outside the household influences women's health and social outcomes, and how Korea's dualized labour market structure and pervasive gender-biased economic an employment policies and practices may be contributing to and reinforcing this inequality.

The next section reviews literature on the impacts of the pandemic on household gender division of carework, and in particular on families with children. Section 3 provides context for understanding the Korean labour market and its implications for gender. This section also describes our data and research method and its limitations. In Section 4 we discuss three key findings from the survey. Finally, Section 5 discusses the theoretical and policy implications of our findings for care, carework, and gender equality.

2. LITERATURE REVIEW

UN Women's recent surveys based on data from 47 countries show that across the globe families have been at the frontline of the COVID-19 pandemic, absorbing much of the pandemic-induced care shock by increasing and intensifying unpaid care and domestic work at home. While both men and women have increased their unpaid carework, women have taken on the bulk of this work (UN Women, 2020). Survey reports show that in the Asia-Pacific region, 60% of women and 54% of men surveyed claim that they have increased their unpaid carework since the pandemic's outbreak. This is impressive and disconcerting, because "this is on top of evidence showing that in the Asia-Pacific region, women are already spending four-times as much time as men in unpaid carework prior to the crisis" (UN Women, 2020b: 9). Women in the Asia-Pacific region have increased the amount of care that they provide in almost all categories when compared to men. These categories include homeschooling, physical childcare, playing and reading to children, and providing emotional support for adults. The only category in which men and women have increased their carework by about an equal amount is in "assisting adults with medical/physical care." Here, both men and women have increased the amount of care they provide by about 20% during the pandemic. As a result of these increases in unpaid care and domestic work and the rise in domestic violence and gender-based violence, UN Women concludes that across the region, women have been more adversely impacted physically and mentally compared to men (UN Women, 2020b). Similar patterns of women spending more time doing intensive unpaid carework are also observed in Europe, Central Asia, and the Arab States (UN Women, 2020c, 2020d).

In North America and Europe parents are also doing more childcare as a result of full or partial lockdowns and/or school closures. In these regions, in almost all cases, both employed and non-employed mothers are doing more carework than fathers (Adam-Prassl et.al. 2020; Seville and Smith, 2020; Andrew et.al. 2020; Statistics Canada, 2020; Leclerc, 2020). For example, Adam-Prassl et.al.'s comparative study of the labour market impacts of COVID-19 in the US, the UK, and Germany found that mothers were doing more homeschooling and childcare than fathers in all three countries (Adam-Prassl et.al., 2020: 6). Moreover, they also found that women were more likely to lose jobs than men as the result of pandemic lockdowns in the US and the UK, and that women's job losses in the US and Germany were positively associated with their care responsibilities. Andrew et.al.'s (2020) study focusing on the UK found that while overall mothers increased their share of childcare, fathers increased the time that they spent on unpaid childcare at home if they were furloughed or lost their jobs due to the pandemic, suggesting that fathers' involvement in unpaid childcare at home is closely dependent on their employment status whereas mothers' involvement in unpaid childcare at home has no relationship to their employment status. Building on Adam-Prassl and her colleagues' work, Sevilla and Smith compared the allocation of unpaid childcare within households before and after the onset of the pandemic in the UK. Their survey reveals that the persistence of unequal gender divisions in providing childcare pre- and post-pandemic is "characterized by women specializing in caring activities regardless of changes in their employment status" (Sevilla and Smith, 2020: 2). This research points to the limit of the standard, mainstream economic argument that ties household decision-making about the division of care and domestic work to efficiency that rationalizes women's unpaid care and domestic work as a natural extension of women's comparative advantage in child-rearing (Becker, 1991). Rather, it underscores how such mainstream economic thinking may instead serve to justify and reinforce gender inequalities within the household and in the labour market, and calls for a more socio-cultural approach to explaining the phenomenon.

In Canada, Statistics Canada's survey of families during the pandemic found that amongst families with school-age children, homeschooling responsibilities fell primarily on mothers: 64% of mothers reported that they led "homeschooling or helping children with homework" compared to only 19% of fathers (Leclerc, 2020). This same survey shows that 74% of parents were "very" or "extremely" concerned about "balancing childcare, schooling, and work," and 61% were also "very" or "extremely" concerned about managing their "child's or children's behaviours, stress levels, anxiety, and emotions" (Statistics Canada, 2020b). These findings suggest that increased childcare and difficulties associated with balancing care and work at home may have adverse impacts on both parents' and children's mental health.

The impacts of pandemic lockdowns are not uniformly spread across all families. For example, Andrew et.al.'s (2020) study of children's home learning in the UK shows that while most parents struggled with homeschooling, high-income households fared much better than low-income households: compared to children from lower-income households,

children from high-income households were able to spend more time studying, received more support from their schools in forms of online classes and other virtual learning, and were better resourced in terms of having learning and homeschooling services and materials. This suggests that growing educational inequalities have been exposed and induced by the pandemic. Studies in Canada have drawn a similar conclusion: school closures have led to considerable health and academic setbacks for low-income households and children from Black and other racialized communities, including the loss of access to nutritious meals through school meal programs, inadequate academic support for students, and increased anxiety and stress for children and parents (James, 2020). These studies underscore not only the deleterious impacts of pandemic lockdowns on families' mental health and wellbeing, but also that these impacts have been much harder on women than men.

While emergent research on the impacts of COVID-19 lockdowns on families are helping to build a more comprehensive global picture of family care and caring and the durability of unequal gender divisions in carework despite the crisis, most of these studies are focused on high-income Western countries. Except for UN Women's rapid assessment surveys, which are focused primarily on low- and medium-income countries in the global South, very little is known about the impacts of pandemic lockdowns and social distancing measures on families outside of North America and Europe. Our study will contribute to this emerging literature by providing new information about the impacts of COVID-19 lockdown on families in Korea. Our survey of family childcare arrangements and their impacts on working parents in Korea is the first and only survey that we are aware of that examines this issue in a higher-income Asian country. In addition, our study and analysis could also contribute to broader theoretical and policy debates on gender norms about care and caring and the roles of policies and institutions in shaping and sustaining such gender norms.

2.1 CONTEXT

a) Korea's Labour Market Structure and Gender Inequality

Korea has one of the most gender unequal labour markets in the world. In 2019, Korea's gender wage gap was the largest in the OECD, at 32.5%. This is more than double the OECD average of 12.9%; noticeably higher than that of the US and Canada (18.5 and 17.6%, respectively); and comparatively higher than the next highest OECD gender wage gap country, Japan (23.5%) (OECD, n.d.-b). An important factor contributing to Korea's dismal gender labour market inequality record is a labour market structure that penalizes women in at least two ways. First, the Korean labour market is highly gender segregated, horizontally and vertically. Most female workers in Korea are concentrated in three industrial sectors: wholesale and retail trades; accommodation and food service; and education, health, and social services. Male workers are mainly found in higher wage sectors: mining, manufacturing, construction, wholesale and retail trades, transportation and storage, and utilities. Within industries, women are more likely to work as service and

elementary workers while men are more likely to occupy better paid jobs in sales, craft and related trade, and managerial positions. The only area where Korean women have made some advances in the recent years is the professional sector, but even within this sector women are still paid less than men (KWDI, n.d.).

Second, and more importantly, Korea's dualistic labour market structure creates huge barriers for women to access more secure and better-paying jobs. Korea's state-led industrialization process that occurred in the 1970s, was premised on a rigid labour market that privileged large enterprises in core industrial sectors (e.g. Hyundai, Samsung, Daewoo, etc.). These large enterprises were supported by a network of subsidiary industries consisting of SMEs providing parts and services. This industrial structure protected male workers in core industries, leaving women and other disadvantaged workers out in the peripheral labour market. The system worked well during high economic growth period from 1970s to1990s, but began to falter when Korea was hit by the Asian Financial crisis of 1997/98. The government response to the crisis, following the IMF rescue conditionality and in light of increased globalization and global competition, was to flexibilize the labour market. But rather than restructuring the rigid dualistic labour market system as a whole, large enterprises opted to flexibilize their internal employment structure by using a twopronged strategy: tightening their core work forces and expanding their pool of non-regular and contingent labour forces, further outsourcing parts and services to SMEs. This intensified labour market dualization and worsened pre-existing gender inequality and employment insecurity for women and young people by pushing more of them into the peripheral labour market (Peng, 2012; Lee and Kim, 2020). Indeed, Korea now stands out among OECD countries for its very high level of non-regular employment, with 38.5% of female workers employed as non-regular workers in 2019 (KWDI, n.d.). Increased labour market dualization not only explains Korea's huge gender wage gap but also its growing income inequality since 2000 and its high poverty rate among single-mother households.

The Korean government has made some effort to address gender inequality and implemented some progressive work-family balance policies since 2000, including paid maternity and parental leave and free childcare for children aged 0 to 5. However, these programs have had little impact in ameliorating gender inequality in the labour market (An and Peng, 2015; Peng, 2011, 2012-b; Lee, 2017; Estevez-Abe and Kim, 2014). Labour force participation rates among married women have remained relatively consistent for two decades, rising only from 49% in 2000 to 52% in 2019. The gender wage gap and women's non-regular employment rates remain very high. This is largely because post-2000 work-family balance policies were not aimed at directly addressing gender inequality in the labour market or removing obstacles for women seeking secure, well-paying jobs, but rather at stimulating women's labour market participation in non-regular employment and shoring up the country's very low fertility rate. By maintaining this dualized labour market structure, failing to counter employer bias for male workers, and not regulating the widespread use of female non-regular workers the Korean government failed to correct systemic gender inequality in the country's employment practices.

b) Korea's COVID-19 Situation

As of June 4, 2021, Korea had a total of 142,852 COVID cases and 1,969 deaths. This compares quite favourably to other OECD countries, such as Canada (1,395,336 and 25,627 respectively), the US (33,175,821 and 593,75), and the UK (4,499,878 and 127.812) (Johns Hopkins University, n.d.). During Korea's first social distancing period (March to May 2020), schools and childcare centres were closed, but most businesses remained open. Since Korea's social distancing measures only recommended that employers allow workers to work from home, only some businesses complied. Those parents whose employers did not grant them a work from home option were forced to use family care leaves and statutory annual holidays to stay home or to work from home as there were few to no alternatives for childcare. Korean Employment Legislation allows employees to take up to 90 days of unpaid family care leave a year. Realizing the problems associated with parents not able to work from home during the social distancing period, the government eventually introduced a 10-day Emergency Family Care Leave with subsidy of ₩50,000 (USD\$45.00)/day for employees in May 2020. This was later extended to up to 14 days. Contrary to the common assumption that extended households are the norm in Asia, a huge majority of Korean households are small and nuclear. As illustrated in Table 1, over 75% of Korean households are made up of single or two-generation families, and today, threegeneration families make up less than 5% of total households. This means that most parents with small children do not have resident grandparents to fall back on for childcare. As a result of urbanization, changes in cultural norms about childrearing, and the post-2000 universal publicly funded childcare policies described in the previous section, only a small proportion of grandparents in Korea are involved in the care of their grandchildren. 56.3% of 0-2 year-olds and 94.6% of 3-5 year-olds in Korea were enrolled in early childcare and education facilities in 2017 (OECD, n.d.), and studies show that less than 10% of Korean grandparents were engaged in the care of their grandchildren (Ko and Hank, 2014). For those who were not able to work from home or who urgently needed childcare, emergency childcare services were also made available in childcare centres. Initially, very few parents made use of these emergency childcare services, partly due to general anxiety about the COVID-19, and partly because they were using their emergency family care leave or annual paid annual holiday leave. However, as emergency family care leave support and other childcare options began to run out, emergency childcare service usage rates began to climb, from 10% at the end of February to 73% by the end of May (MOHW, 2020).

Table 1. Korean Household Structures

	Couple + child(ren)	1 person	Couple only	3 generations	Other
2010	37.0	23.9	15.4	6.1	17.6
2019	29.6	29.8	16.3	4.5	19.8

Source: Statistics Korea. 2019. Household Estimates

3. DATA AND METHODS

We conducted an online survey based on a national sample of 1,252 individuals (523 men and 729 women) who were married (but not to each other within the sample group) and who were parents of at least one child aged between 0 and 12. The samples were drawn based on the distribution of children aged 0-12 in 2020 National Resident Registration Data in Korea (April, 2020). Because we were interested in understanding the experience of parents who had to manage work and childcare, we excluded people who are living in households with other family members including grandparents, children over 18 years old, and other relatives. As shown on Table 1, less than 5% of households in Korea today are three- or more generation families. We have also oversampled women to secure sufficient cases both for mothers who are in paid work and those who are not. The data was weighted to reflect the regional distribution of target households. The online survey was managed by Gallup Korea and carried out from June 12 to July 6, 2020.

To investigate the experience of managing childcare during the social distancing period, we asked a set of questions about the respondents' and their spouse's work and childcare arrangements before and during the social distancing measure, including their employment status, their capacity to work from home, their use of paid and unpaid leaves in order to take care of their children, their average time spent on childcare and housework, and their feelings and experiences. As the government began lifting the first social distancing measure at the end of May, we conducted the survey in June while the respondents' thoughts and experiences of the social distancing period were still fresh. The respondents were asked to answer retrospectively about their experiences during the social distancing period. Respondents were informed and reminded that "before the COVID-19" in questions referred to the situation up until the end of February.

For this analysis, we investigated people who were already employed before the COVID outbreak (n=971) in order to examine the impacts of the COVID-19 on their work-family balance before and after the social distancing period. Table 2 is the descriptive summary data of the sample. Among the respondents who were employed before the COVID-19 outbreak, 51.5% were fathers and 48.5% were mothers. The overwhelming majority (95.5%) of the respondents were in their 30s and 40s. This is not surprising, both because the average age at first marriage in Korea is very high-28.9 years for women and 31.8 years for men in 2010, and 30.2 years for women and 32.9 years for men in 2017 (KWDI, 2019)—and because births outside of marriage in Korea are extremely low—at 2.2% in 2018 (OECD, n.d.). This combination of late age at first marriage and low births outside of marriage implies delayed childbirth. Indeed, Korea has the highest mean age for women at first birth in OECD, at 32.6 in 2017 (OECD, n.d.). It is therefore not surprising that overwhelming majority of parents in the sample are in their 30s and 40s. Over 90% of families surveyed had either one or two children. This is also not surprising given Korean women's later age at first marriage and first childbirth, contributing to very low total fertility rate-0.84 in 2020 (Statistics Korea, n.d). Most respondents had above high school level education: 75.3% of men and 80.5% of women had university degrees, and 19.1% of men and 10.6% were had postgraduate degrees. This reflects Korea's very high post-secondary education attainment rate, currently at about 70% for 24-35 year-olds. However, we cannot rule out the possibility that we have under-sampled parents with lower education levels, which is one limitation of conducting a online survey. The majority of respondents were with a spouse who was also employed (86.1% of men, 96% of women).

The majority of employed parents in our sample (92.1% of fathers and 74.3% of mothers) were working as regular workers. The proportion of mothers in non-regular employment in our sample is about half the national average for all female employees, at 17.6% compared to 38.5%. This may be because of the age group of our sample. Non-regular employment rates for women in their 30s is 22.8% and for women in their 40s is 26.7% (KLI, 2020). While about three-quarters of employed mothers were in full-time employment, 20.7% were working on part-time basis. In contrast, 92.8% of fathers were working fulltime. Overall, mothers' wages were much lower compared to those of fathers: before the pandemic, 64.7% of mothers earned less than ₩3.0 million/month (US\$2,675) compared to 18.9% of fathers; in contrast, 43% of fathers earned ₩4.0 million or more as compared to 16.5% of mothers. The average monthly household income in Korea at the end of 2019 was ₩4.77 million (US\$5,567). Since the pandemic's outbreak, there has been a drop in most parents' income: 68.5% of mothers and 29.9% of fathers earn less than ₩3.0 million per month. The drop in fathers' monthly income is much more dramatic than that of mothers. This may be because mothers were already earning a lower income. In conclusion, despite the post-pandemic decline in family income, the data suggests that fathers continue to maintain labour market advantage over mothers.

Table 2. Sample Characteristics

	Men	Women	Total
	N=498	N=473	N=971
Age	41.4 (4.7)	39.4 (4.9)	40.4 (4.9)
Education			
High school	5.6%	8.9%	7.2%
University	75.3%	80.5%	77.9%
Postgraduate	19.1%	10.6%	14.9%
Age Group			
aged 25-29	1.0%	2.3%	1.6%
aged 30-39	31.5%	48.2%	39.6%
aged 40-49	64.1%	47.4%	55.9%
aged 50-56	3.4%	2.1%	2.8%
Number of Children			

¹ "Employees" refer to wage workers who are not employer or own account holders. In South Korea regular employees refer to wage workers who are not temporary or daily workers, who are classified as non-regular workers. Regular workers includes both full-time and part-time workers.

1	41%	40%	40%
2	52%	49%	51%
3+	7%	10%	9%
Dual earner	86.1%	96.0%	90.9%
Type of employment			
full time	92.8%	71.0%	82.2%
part time	1.2%	20.7%	10.7%
self-employed	6.0%	8.2%	7.1%
Area			
metropolitan	49.2%	42.7%	46.0%
small city/rural	50.8%	57.3%	54.0%
Monthly Individual Income before Covid-			
19			
below 2000K	3.0%	33.8%	18.0%
2000K-2990K	15.9%	30.9%	23.2%
3000K-3990K	38.2%	15.4%	27.1%
4000K-4990K	23.3%	9.3%	16.5%
5000K+	19.7%	10.6%	15.2%
Monthly Individual Income after Covid-19			
below 2000K	7.4%	41.6%	24.1%
2000K-2990K	22.5%	27.9%	25.1%
3000K-3990K	34.1%	14.0%	24.3%
4000K-4990K	19.1%	8.9%	14.1%
5000K+	16.9%	7.6%	12.4%

There are two limitations to this survey study. First, because it was an online survey based on an online panel, we cannot be certain about the national representativeness of the sample. For example, we have slightly more men who are dual-earners than the national distribution. This may be because of online survey bias. However, the survey was carried out nationally and we received responses from across the country. Second, the data does not include single parents, who may be suffering the most due to COVID-19 social distancing measures. We did not include single parents because we were interested in learning about the distribution of unpaid childcare between mothers and fathers during Korea's first social distancing measure, about how they negotiated the unpaid childcare, and about their experiences. It was therefore not appropriate to survey single-parents who, we assumed, had little option but to take on most additional unpaid childcare by themselves during the period covered by the survey.

4. FINDINGS

Our survey found that despite its short period the social distancing measure affected working parents economically and psychologically. Having to multi-task paid work and unpaid childcare at home affected both men and women, but the impacts were greater for mothers than fathers. In particular, we found that: 1) while most mothers and fathers did take some time off from their workplace to work and care for their children at home, fathers were more likely to take shorter leave, while mothers took longer periods of time off work and were more likely to be the main carer for their children; 2) mothers were more likely to experience difficulties managing work and childcare responsibilities while working from home; and 3) as a result of work-care conflict, a significant proportion of mothers quit or considered quitting their jobs, whereas almost none of the fathers quit or considered quitting for this reason.

1) Unequal distribution of childcare time and intensity between mothers and fathers

Even though most businesses remained open during Korea's first social distancing measure many parents were unable to go to work because of daycare and school closures. Our survey found that about only a quarter (24.9%) of fathers and a third (33.4%) of mothers ended up working from home at some point during the social distancing period, indeed. 70.9% of people we surveyed did not work from home because their employers "did not implement work from home policy." Some privileged workers—many of them working in government or other public institutions such as schools and universities, and some hightech companies where working from home was possible—were able to work from home because their employers either required or allowed them to do so. A large majority of parents had to use the 10-15 day emergency family care leave or their annual holiday leaves in order to stay home to care for their children, while also often combining this with their work. A breakdown of people's working conditions and who was able to work from home shows that among those who were working in companies/workplaces where employers asked all workers to work from home, 91% of mothers and 94% of fathers stayed home to work. This group is a small minority in our survey. Among parents who were working in workplace where most non-essential workers were given the option to work from home, 80% of mothers and 68% of fathers worked from home at some point during the restriction period.

Few parents were able to work from home during the entire social distancing period, but women were more likely to spend longer periods of time working at home than men. Whereas nearly half of fathers who worked from home worked for a total of a week or less (23.4% of them worked from home for one week; 21.6% for less than a week), nearly half (46%) of mothers worked from home for four weeks or more. Only 29.7% of mothers worked from home for one week or less (Figure 1). While working from home, mothers were more likely to be the main carers for their children. 71% of employed mothers said that they were the main carers for their children while working from home, while only 39% of employed fathers said so. These numbers are partially explained because some fathers were married to a stay-at-home (i.e. non-employed) wife. Yet, even for respondents in dual-

earner households, the percentage is similar: only 40% of dual-earner household fathers said that they were the main carers compared to 70% of dual-earner household mothers. Non-resident grandparents were also an important source of childcare for parents during the social distancing period: about one in ten (11.1% of fathers and 13.3% of mothers) parents surveyed said that the grandparents of their child/children were the main carers of their children while they were working from home (Figure 2).

Figure 1. Average Length of working at Home during the Social Distancing by Gender (%)

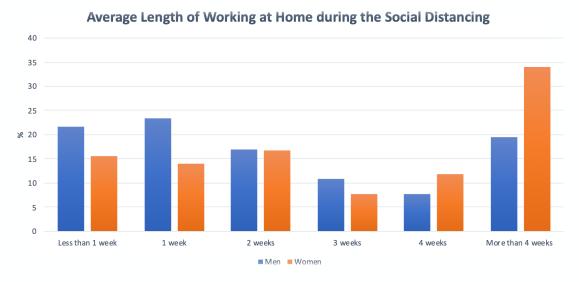
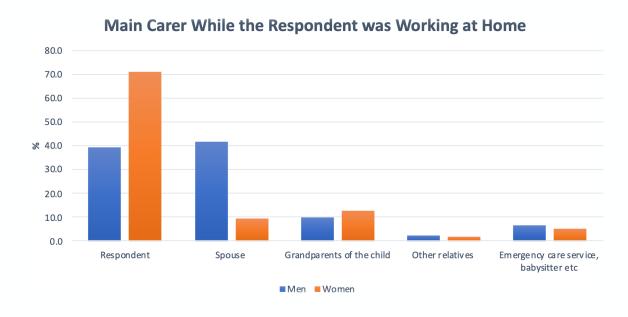


Figure 2. Main Carer of the Children while the Respondent was Working at Home during the Social Distancing by Gender (%)

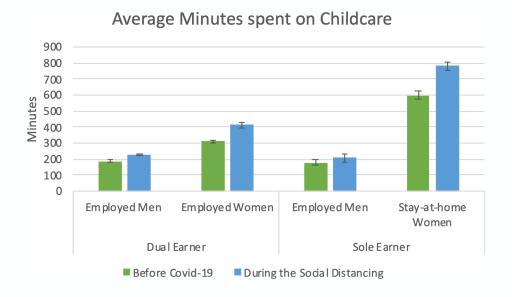


A comparison of the total amount of time employed and not-employed mothers and fathers spent on childcare shows that both employed and not-employed mothers spent disproportionately longer hours caring for their children when compared to fathers. As shown in Figure 3, mothers in dual-earner households increased their total daily childcare hours by 104 minutes, from 309 to 413 minutes (p<0.0001), during the social distancing measure. In contrast, fathers in dual-earner households increased their childcare hours by only 41 minutes, from 187 to 228 minutes (p<0.0001), and sole-earner fathers increased their childcare hours by only 29 minutes, from 179 to 208 minutes (p<0.0005). When asked to estimate the amount of time their spouses spent on childcare, employed mothers in dualearner households estimated that their spouses had increased their total daily childcare hours by 48 minutes (from 182 to 230 minutes), while fathers in dual-earner households estimated that their employed spouses increased their total childcare hours by 57 minutes (280 to 337 minutes) (Table 3). These figures show that, on average, not only have employed mothers in dual-earner households increased their childcare hours by a larger amount than employed fathers in dual-earner households, but that even before the pandemic, employed mothers in dual-earner households were spending significantly more time doing childcare than their spouses. Indeed, it appears that the COVID-19 social distancing measure has further exacerbated the unequal division of childcare between mothers and fathers.

The respondents' estimates of their own childcare times and of their spouses' childcare times are worth noting (see Table 3). The estimates of their spouses' childcare times are quite similar to the estimates of dual-earner household fathers' estimates of their own time spent on childcare, whereas dual-earner household fathers appear to underestimate their spouses' childcare hours. At the same time, sole-earner fathers' estimates of their spouses' childcare time are fairly similar to not-employed mothers' estimates of their own childcare time (710 vs 782 minutes, respectively—about 91% of not-employed mothers' estimates of their own time spent), whereas sole-earner fathers' estimates of their own childcare time are noticeably higher than not-employed mothers' estimates of their spouses' childcare time (208 vs 168 minutes, respectively—124% of mothers' estimates). This suggests that fathers are more likely to over-estimate their own childcare time, and under-estimate their spouses', a finding that corresponds closely with Statistics Canada's finding (Leclerc, 2020). The unequal distribution of childcare is further illustrated by unequal levels of satisfaction towards the share of childcare between men and women: whereas the majority of fathers (74.2% of employed and 70.1% of not-employed fathers 2) were satisfied with the distribution of unpaid childcare between themselves and their spouses, only about half of mothers (54.6% of employed and 51.7% of not-employed mothers) were satisfied with this distribution.

² The not-employed fathers represent only 4% of the sample.

Figure 3. Average Minutes Spent on Childcare before the COVID-19 and During the Social Distancing by gender and employment status



Note: For this analysis, mothers and fathers who were employed before the break of the COVID-19 and continued to be employed after the first social distancing were included as employed group (n=872), and mothers who were not employed before and after the social distancing were included as stay-at-home group (n=257). Mothers who left the job after the break of the COVID-19 were excluded from this analysis.

Table 3. Average minutes of childcare before and during the social distancing

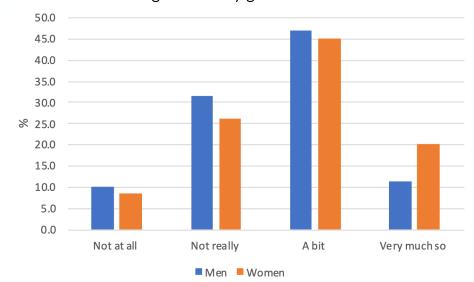
	Dual Earner			Sole Earner				
	Employed Men	Spouse	Employed Women	Spouse	Employed Men	Spouse	Stay-at Home Women	Spouse
Before Covid- 19	187	279	309	170	179	545	599	143
During the Social Distancing	228	332	413	221	208	710	782	168
Increase	41	53	104	51	29	165	183	25

2) Parents' experience of managing work and childcare responsibilities

While both employed fathers and mothers found it difficult to manage work and childcare responsibilities while working from home, mothers found it more challenging than fathers. For example, more mothers were worried about their productivity as a result of working from home: 65.3% women responded that they felt their productivity had declined by a bit or very much, whereas only 58.4% fathers felt that way. 50.7% of mothers claimed that they were a bit or very worried that working from home would disadvantage their careers

or their workplace status compared to only 41.3% of fathers (Figure 4). This may be because mothers were more likely to spend longer periods of time working from home, and/or that their employment conditions were more precarious than that of their male colleagues. When asked about the specifics of their worries and concerns about working at home during the social distancing period, 40.7% of employed mothers said that they felt guilty towards colleagues (who were not working from home) because they did not or could not work as much usual. This worry caused mothers take as many not. family care leave even if it was made available. The most common reason given by mothers who did not take family care leave was "because I was worried about how my employers and colleagues would think [about me]." This also suggests that mothers felt vulnerable and anxious about over managers' and co-workers' perception of their performance, a feeling that is often associated with maternity leave guilt (Maxwell et.al., 2019).

Figure 4. % of respondents who felt their productivity was negatively affected due to childcare while working at home by gender



3) Adverse impacts of work-family conflict during the social distancing period

Increased childcare burden and difficulties associated with managing work and childcare at home also had direct mental health impacts on parents. While the majority of parents found it very hard to work while caring for their children at home, more mothers (81.7%) found it difficult compared to fathers (67.9%). Many parents were also worried about their own job security. For many, the challenge of balancing work and childcare against the backdrop of pandemic-induced economic uncertainties was their main sources of worry and anxiety. Our survey found that 51.4% of fathers and 61.2% of mothers were worried that they might lose their jobs, and thus all or part of their household income. At the same time, difficulties related to managing work and childcare also prompted many parents, and particularly mothers, to consider quitting their jobs. 16.6% of mothers had quit their job and 54.5% of employed mothers said that they considered quitting their jobs, while only about a third of fathers considered quitting (31.4%) (Table 4). Among mothers who quit their jobs during the

social restriction period, 34.8% stated that they quit in order "to take care of the child," while none of the fathers who quit their jobs gave childcare as the reason for quitting.³

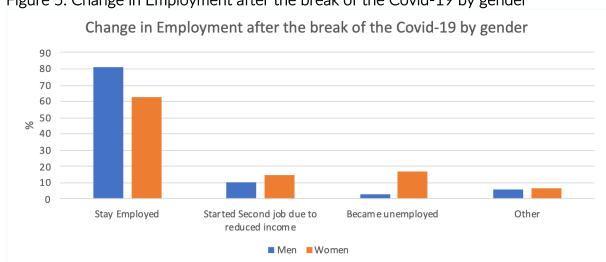


Figure 5. Change in Employment after the break of the Covid-19 by gender

Table 4. Feeling of parents during the social distancing

%	Mothers	Fathers
It was too hard to work and take care of	81.7	67.9
children		
Considered quitting the job	54.5	31.4
Worried about losing the job or loss of	61.2	51.4
income		

5. DISCUSSIONS

Our findings show that despite its short duration, Korea's first COVID-19 social distancing measure had appreciable impacts on parents. While both parents were affected, the measure's impact on mothers was greater than on fathers. Mothers did more childcare and had more difficulties balancing work-family responsibilities. Mothers were more likely to quit or consider quitting their jobs because of the difficulties associated with childcare while almost none of the fathers quit or considered quitting because of childcare. Our findings add to an emerging literature that demonstrates the unequal impacts of pandemic-related

³ Only 2.7% of the fathers had quit their jobs. 31.4% of fathers also considered quitting their jobs, but not because of problems related to balancing work and childcare.

childcare and school closures on women and men, and raises several important questions related to care, carework, and gender equality.

First, our findings show the universality of unequal impacts of the pandemic on women and men in relation to the unequal distribution of care within the household. The resonance between our findings and those from North American and European studies highlights the underlying pervasive unequal gender division of carework that cuts across socio-economic, cultural, and geographical boundaries. Moreover, it also underscores the intractability of this unequal gender division of carework even in the face of a monumental and unprecedented socio-economic crisis. This points to gender as a primary determinant of human inequality and tests the limit of the mainstream economic argument that sees household division of labour as an efficient utility-optimizing arrangement. It also calls into question a simplistic essentialist cultural argument that tries to explain unequal gender division of labour in terms of cultural specificity, and directs us to analyze more critically how structural (institutions and policies) and ideational (social norms) factors might interact to shape and reinforce the gender distribution of unpaid carework. Many economists and sociologists have attempted to explain the importance of social norms in shaping household distribution of unpaid carework. For example, Sevilla-Sanz et.al.'s (2010) analysis using a Spanish Time Use survey found that women's relative share of unpaid household work remained unchanged regardless of their earnings relative to their spouses and moreover that their share of unpaid childcare remained flat regardless of their spouses' income. They argue that this persistent unequal distribution of unpaid care and domestic work can be best explained by "social norms, whereby women specialize in this type of caring activity, regardless of their relative productivity or bargaining power" (Sevilla-Sanz et.al., 2010: 177). Similarly, in their study of unpaid eldercare in the UK, Della Guista and Jewell (2015) also conclude that adult children's decisions to care for their ageing parents are, to a large extent, informed by a pervasive social norm about filial care obligation, which in turn are underpinned by gender norms about women's caring role. It is therefore not surprising, they argue, that an overwhelming majority of carers are women. A recent Danish study confirms that such social norms are often transmitted intergenerationally from parents to daughters (Kleven et.al. 2018).

The World Value Survey shows that the majority of Koreans continue to subscribe to the idea of maternal care for young children. In its 2018 survey, nearly two-thirds (64.7%) of Korean respondents agreed or strongly agreed to the statement "pre-school child suffers with working mother," a noticeably high proportion compared to other countries, including the UK (23.3%), the US (20.7%), and Japan (13.4%). Similarly, more than half (53.0%) of Koreans in the survey agreed or strongly agreed to the statement, "when jobs are scarce, men should have more right to job than women" (World Values Survey, n.d.). These responses suggest that strong social norms about maternal care and male bias in employment may be at play in shaping the unequal distribution of unpaid childcare within Korean households.

 4 The figures for the UK, the US, and Japan were 6.5%, 5.2%, and 25.0%, respectively.

Social norms, however, might not be the only factor influencing the household division of labour. Our findings suggest that in addition to social norms, institutions and policies may also shape and reinforce household decisions about who does how much and what kinds of unpaid carework. Feminist scholars have long argued that welfare state policies powerfully structure and institutionalize gender roles and relations (Kremer, 2007; Lewis, 2009; Orloff, 1993). Not only do the financial and regulatory conditions attached to workfamily policies, such as parental leaves, childcare, and other family and care provisions shape the household division of labour and gender relations by creating incentives and disincentives for parents to decide whether, who, and how to work and/or care, but they also serve as institutional and cultural templates to guide and regulate family and gender roles vis-à-vis work and welfare. Indeed, prior studies in Korea demonstrate the role of policies and institutions in shaping public expectations and social norms. For example, before the introduction of the Long-term Care Insurance (a mandatory social insurance that provided universal public long-term care support for older people) in 2008, the overwhelming majority of Koreans (90% in 1998) believed that family should be responsible for the care of the old; today, only 22% of Koreans believe that, and 62% believe that both family and government/society should care for the elderly (KOSIS, n.d.; Peng, 2018). In a similar vein, the Korean government's post-2000 employment-focused work-family policies, though clearly not effective in reducing gender inequality in the labour market, may have contributed to some changes in public attitudes towards women's employment and the division of housework. For example, national surveys show that in 2009 only 53.5% of Korean adults agreed with the statement that women should "always" work and another 23.3% that women should work "both before childbirth and after raising the children." By 2019, these figures had risen to 61.4% and 19.0%, respectively. Similarly, in a 2008 social survey, 59.8% of respondents agreed with the statement that housework should be done "mostly by wife with husband doing some" and 32.4% agreed that "both [husband and wife] should share housework equally"; in 2020, these figures had flipped to 30.8% and 62.5% respectively (KOSIS, n.d.). This suggests that free universal public childcare and parental leave policies in Korea have influenced people's incentives and attitudes towards women's employment and division of unpaid care and domestic work.

At the same time, Korea's dualized labour market also strongly pre-determines employer bias for male workers and pushes women back to the household and to unpaid carework. As the labour market dualization process continually pushes women and new job entrants out from the core employment sector to the periphery, it makes core male wage-earners more precious. This may in turn contribute to unequal distribution of unpaid carework within the household. It is possible that a couple might prioritize a husband's paid employment and career over a wife's simply because of the husband's higher earning potential and/or job security, thus reinforcing the unequal division of carework within household. The fact that most working fathers in the survey took less than a week out from their workplace to work from home during the social distancing period, and that more mothers have quit and/or considered quitting their work as a result of work-family conflict suggests that 1) mothers' employment and careers are considered more dispensable than fathers' and/or that 2) unemployment is a more possible and acceptable option for women.

A more in-depth qualitative study of parents' attitudes toward work-family balance, employment options and decision-making, and negotiating unpaid carework during the COVID-19 pandemic would help elucidate the relationships between social norms, labour market structures, and policies and their impacts on work-family balance and the division of carework within households.

Finally, our findings also raise a question about the potential of global crises in facilitating transformative changes. Despite significant news coverage of and political debate on the importance of care and careworkers since the beginning of the COVID-19 pandemic, very little appears to have changed in terms of how care is organized and transacted (at least within households), nor is much known about changes in the public's attitude towards care and carework in the medium- or long-term. While news media and recent government policy measures have raised societal awareness and appreciation for frontline careworkers, prompting some to push for change (for example, public demonstrations of appreciation for careworkers, advocacy for COVID-related wage increases, investments in social infrastructure, etc.), concrete shifts towards better valuation and/or greater redistribution of paid and unpaid carework within and outside of households still remains unclear and slow.

6. CONCLUSION

Across the world, the COVID-19 pandemic has exposed pre-existing multidimensional and intersecting inequalities and the importance of care and carework. It has also created a rare opportunity for researchers to examine not only the impacts of lockdowns on families but also to examine "how we organize and practice care and caring" and how we should organize and practice care and caring (Fine and Tronto, 2020: 301). The potential for the crisis to facilitate changes to the gender division of unpaid carework within household is great, but the direction of change remains unclear: it could move towards greater equality, greater inequality, or some of each. Our survey found that while both women and men increased their total time spent on childcare, mothers' childcare times and childcare burden increased much more than that of fathers. This in turn had direct and negative impacts on mothers' economic and mental wellbeing. Rather than facilitating a better redistribution of unpaid carework within the household, our findings suggest that Korea's first COVID-19 social distancing measure may have further entrenched the pre-existing unequal gender division of labour. This finding corresponds closely with findings from similar studies in North America and Europe, underscoring the resilience of gender inequality even in the face of a global crisis. As we look to a post-pandemic future, we are reminded of the monumental challenges that we face in tackling pervasive gender inequality. True, the pandemic has created a portal (Roy, 2020) and a momentum to "build back better," but having a portal in and of itself will not ensure that we achieve a more equal and just society; to be sure, the road to a better and more equal future will take firm individual, collective, policy, and institutional resolve to continuously push for change.

REFERENCES

Adams-Prassl, A., Boneva, T., Golin, M., and Rauh, C. (2020) 'Inequality in the impact of the coronavirus shock: Evidence from real time surveys', Journal of Public Economics, https://doi.org/10.1016/j.jpubeco.2020.104245

An, M.Y., and Peng, I. (2015) 'Diverging Paths? A Comparative Look at Childcare Policies in Japan, South Korea and Taiwan', Social Policy & Administration, 50(5): 540-558.

Andrew, A., Cattan, S., Costa-Dias, M., Farquharson, C., Kraftman, L., Krutikova, S., Phimister, A., and Sevilla, A. (2020). Learning during the lockdown: real-time data on children's experiences during home learning, Institute for Fiscal Studies, IFS Briefing Note BN188.

Becker G. A. (1991). Treatise on the Family. Cambridge Mass.: Harvard University Press.

Carers UK, 2020. Caring Behind the Closed Doors: forgotten families in the Coronavirus outbreak, April 2020. Caring behind closed doors April 2020. Caring behind closed doors

Centers for Disease Control and Prevention. n.d. CDC COVID Data Tracker, https://covid.cdc.gov/covid-data-tracker/#global-counts-rates

Della Guista, M. and Jewell, S. (2015) 'Unpaid Work and Conformity: why care?', Cambridge Journal of Economics, 39: 689-710.

Estevez-Abe, M. and Kim, Y.S. (2014) 'Presidents, Prime Ministers and Politics of Care – Why Korea Expanded Childcare Much More than Japan', Social Policy & Administration, 48(6): 666-685.

Fine, M. and Tronto, J. (2020) "Care goes viral: care theory and research confront the global COVID-19 pandemic", International Journal of Care and Caring, 4(3): 301-309.

James, C.E. (2020) Racialized Inequity, COVID-19 and the Education of Black and Other Marginalized Students, Royal Society of Canada, Racialized Communities and COVID-19 report, November 12, 2020. https://rsc-src.ca/en/covid-19/impact-covid-19-in-racialized-communities/racial-inequity-covid-19-and-education-black-and

Johns Hopkins University - Center for Systems Science and Engineering (JHU-CSSE). n.d. COVID-19 Data Repository, https://github.com/CSSESiSandData/COVID-19

Kleven, H., Landais, C., Sgaard, J.E. (2018) Children and gender inequality: evidence from Denmark. NBER WP 24219.

Ko, P-C. and Hank, K. (2014) "Grandparents Caring for Grandchildren in China and Korea: Findings from CHARLS and CLoSA", Journal of Gerontology-Series B, 69(4): 646-651.

Korea Labor Institute (KLI). (2020) Workplace Panel Survey, https://www.kli.re.kr/wps_eng/index.do

Korea Women's Development Institute (KWDI). (2019) Statistical Handbook: Women in Korea 2018, file://Users/Ito/Downloads/Women+in+Korea+2018.pdf

Korea Women's Development Institute (KWDI). n.d. Gender Statistics. https://gsis.kwdi.re.kr/gsis/en/main.html

Korean Statistical Information Service (KOSIS). n.d. Statistical Database. https://kosis.kr/eng/index/index.do

Kremer, M. (2007) How Welfare States Care: Culture, Gender and Parenting in Europe. Amsterdam: Amsterdam University Press.

Leclerc, K. (2020) Caring for their Children: Impacts of COVID-19 on Parents, Statistics Canada COVID-19: Data to Insight for Better Canada, December 14, 2020.

Lee, S.H. (2017) 'The Socialization of Childcare and a Missed Opportunity Through Path Dependence: The Case of South Korea', Social Politics, 24(2): 132-153.

Lee, S.S. and Kim, Y. (2020) 'Female outsiders in South Korea's dual labour market: challenges of equal pay for work of equal value', Journal of Industrial Relations, 62(4): 651-678.

Lewis, J. (2009) Work-Family Balance, Gender and Policy. Cheltenham; Northampton, MA: Edward Elgar.

Maxwell, N., Connolly, L., and Ni Lanoire, C. (2019) 'Informality, emotion and gendered career paths: the hidden toll of maternity leave on female academics and researchers', Gender Work & Organization, 26: 140-157.

OECD. n.d. OECD Family Database, http://www.oecd.org/els/family/database.htm

OECD. n.d.-b. OECD Data, http://data.oecd.org

Orloff, A. S. (1993) 'Gender and the Social Rights of Citizenship: The Comparative Analysis of Gender Relations and Welfare States.' American Sociological Review 58(3):303. doi: 10.2307/2095903.

Peng, I. (2018). 'Culture, Institution, and Diverse Approaches to Care and Care Work in East Asia', Current Sociology, 66(4): 643-659.

Peng, I. (2012) 'Labor Market Dualization in Japan and South Korea' in Patrick Emmenegger, Silja Housermann, Bruno Palier and Martin Seeleib-Kaiser (eds.) The Age of Dualization: The Changing Face of Inequality in Deindustrializing Societies. Oxford and New York: Oxford University Press. pp. 226-252.

Peng, I. (2012b) 'The Boss, the Worker, His Wife, and No Babies: South Korean Political Economy of Care in a Context of Institutional Rigidities', in Shahra Razavi and Silke Staab (eds.) Global Variations in Political and Social Economy of Care: Worlds Apart, Routledge, pp. 80-100.

Peng, I. (2011) 'The Good, The Bad, and The Confused: Political Economy of Social Care in South Korea', Development & Change, 42(4): 905-23.

Roy, A. (2020) 'The pandemic is a portal', Financial Times, April 3. Arundhati Roy: 'The pandemic is a portal' | Free to read | Financial Times

Sevilla, A. and Smith, S. (2020) 'Baby steps: the gender division of childcare during the COVID-19 pandemic', Oxford Review of Economic Policy, doi:10.1093/oxrep/graa027.

Sevilla-Sanz, A., Gimenez-Nadal, J.I., and Fernandez, C. (2010) 'Gender roles and the Division of Unpaid Work in Spanish Households', Feminist Economics, 16(4): 137-184.

Statistics Canada. (2020) Impacts of COVID-19 on Canadian families and children. https://www150.statcan.gc.ca/n1/en/daily-quotidien/200709/dq200709aeng.pdf?st=upN3Z-Tx

Statistics Korea. (n.d.) Statistics Korea Homepage, https://www.kostat.go.kr/portal/eng/index.action

UN Women. (2020) Whose time to care? Unpaid care and domestic work during COVID-19. UN Women - Women Count, https://data.unwomen.org/publications/whose-timecare-unpaid-care-and-domestic-work-during-covid-19

UN Women. (2020b) Unlocking the lockdown: The gendered effects of COVID-19 on achieving the SDGS in Asia and the Pacific

https://data.unwomen.org/publications/unlocking-lockdown-gendered-effects-covid-19achieving-sdgs-asia-and-pacific

UN Women. (2020c) The impact of COVID-19 on women's and men's lives and livelihoods in Europe and Central Asia https://data.unwomen.org/publications/impact-covid-19womens-and-mens-lives-and-livelihoods-europe-and-central-asia

UN Women. (2020d) Rapid Assessment: The Effects of COVID-19 on Violence Against Women and Gendered Social Norms - A Snapshot from Nine Countries in the Arab States Preliminary https://arabstates.unwomen.org/en/digital-

library/publications/2020/08/brief-the-effects-of-covid-19-on-violence-against-womenand-gendered-social-norms

World Values Survey, n.d. World Values Survey, https://www.worldvaluessurvey.org/wvs.jsp