



Women's Working Conditions during COVID-19: A Review of the Literature and a Research Agenda

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Abstract: The COVID-19 pandemic triggered new working modalities, typically aimed at flexibility. However, the COVID-related restrictions caused adverse effects such as unemployment, precariousness, and social anxiety. Effects on working conditions differ depending on the socio-demographic features of those affected (e.g., gender, social status, economic situation, ethnicity). Scholars agree that people who were disadvantaged before the pandemic—the so-called minority power groups, e.g., women, young people, and immigrants—suffered the most from its effects. This literature review systematizes the main findings of studies on one of these minority power groups, namely women.

Keywords: COVID-19; Gender inequality; female workers; working conditions



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1. Introduction and Structure of the Paper

COVID-19 had adverse effects on gender equality, both on a general level and regarding women's working conditions (Yaish et al. 2021). It is well known that government restrictions to fight the pandemic had a different impact on women and men across the globe (Yildirim and Eslen-Ziya 2021). The COVID-19 pandemic shed light on the significant gender gap in working conditions, especially for women working in female-dominated industries and the so-called informal economy (International Labor Organization 2021)¹. This paper reviews the main findings of academic research addressing this issue.

We started the search for the studies to be reviewed by defining the term “working conditions.” The European Foundation for the Improvement of Living and Working Conditions (Eurofound 2011) provides the following definition²:

Working conditions refer to the working environment and aspects of an employee's terms and conditions of employment. This covers the organization of work and activities; training, skills, and employability; health, safety, and well-being; and working time and work-life balance. Pay is also an essential aspect of working conditions, although Article 153 of the Treaty on the Functioning of the European Union (TFEU) excludes pay from the scope of its actions in the area of working conditions. (Eurofound 2011)

The definition encompasses several aspects, from which we identified five crucial dimensions that we expect to be differently affected by the COVID-19 pandemic depending on workers' gender. The selection of these dimensions sets the boundaries of our literature review. Specifically, we considered the following dimensions. First, we thought about the unequal distribution of family burdens: the pandemic increased childcare duties and household management, especially for women. Second, we analyzed women's job losses and income reductions: the pandemic mostly affected female-dominated industries. Third, we considered the modality of working (with a focus on remote working): people were

locked down in their houses in most Western countries, and the need for a different way of thinking about the workers' work–life balance arose. Fourth, we pondered on working hours, the most used measure of working time, and how they were affected by the pandemic. Finally, we illustrated the effects of the pandemic on workers' mental health. Currently, in the literature, most of the evidence is about the psychological conditions of workers, especially female ones.

Although we deem all the reviewed papers important, this work is concise and highlights the most important findings of this novel research stream. With this aim, we resort to a comprehensive theoretical framework—the Social Role Theory—to systematize these findings. We illustrate this framework in the next section.

Then, Section 3 describes how we identified the papers included in this work and how we reviewed them. Despite the short period (2020–2022), we retrieved many studies; thus, to make the review manageable, we applied several criteria to narrow down the number of papers. We reviewed the papers focusing on their main findings and those common to different countries, thus independent of the geographical and cultural context.

Section 4 illustrates the main findings of the papers in five sub-sections, each dedicated to a dimension of the five mentioned above.

Finally, Section 5 discusses the research gaps in the literature on the phenomenon under investigation. Unearthing these gaps is the main contribution of this manuscript; indeed, it offers other researchers interesting insights and sheds light on future research directions.

2. Theoretical Framework

The studies included in this literature review are highly heterogeneous. They are found in several research fields (i.e., economics, social psychology, and sociology) and apply diverse methodologies. Therefore, to systematize this literature, we need to re-read them in the light of a highly comprehensive theoretical framework. We decided to refer to the social role theory (Eagly 1987), which analyzes social phenomena as a reflection of gender roles. Eagly defines social roles as those shared expectations (about appropriate qualities and behaviors) that apply to individuals based on their socially identified gender (Eagly 1987, p. 12). The overarching idea of the social role theory is that men are expected to be more suitable than women for (paid) market labor. In contrast, women are expected to be more suitable than men for (unpaid) home labor. In sum, the division of labor is gendered: women are expected to be the angels of heart, while men are expected to be the breadwinners. The social role theory offers tools and concepts to meaningfully re-read the reviewed studies, allowing us to underline and explain gender differences along the five dimensions of working conditions we mentioned above. Indeed, all the dimensions we identified point to gendered social roles.

The unequal distribution of family burdens directly relates to the gendered division of labor. As to women's job losses and income reductions, we found that women are more likely to prioritize their family burdens at the expense of their careers, giving rise to voluntary job losses. Regarding the modality of working, we found that women are more likely than men to change their way of working during the pandemic, for instance, because remote working mirrors the social roles of the two genders. Similarly, women's high commitment to childcare and household management affects their working hours: women often spend more time on unpaid working hours than men and less on paid working hours. Finally, the gendered division of roles in families and professional activities also explains the expectation of women's and men's attitudes. Due to the common identification of women as angels of the hearth, they are usually expected to care more about people than men. Because of this pressure, women tend to multitask between family and professional tasks, adversely affecting their mental health (e.g., burnout).

3. Materials and Methods

We chose to search for papers to be included in the review on the Scopus database³, considering the three domains of the phenomena under investigation: gender, COVID-19,

and work. Specifically, through brainstorming among the authors, searching for synonymous and related words, and studying keywords of the retrieved papers, we chose words to be included in the search. For the domain “gender”, we chose “gender”, “sex”, “woman”, “women”, and “female”; second, for “COVID-19”, we chose “COVID-19”, “COVID” “SARS-CoV-2”, “coronavirus”, and “pandemic”; third, for the domain “work”, we chose “work*”, “job*”, “labor”, “employ*”, and “unemploy*” (see the Table 1).

Table 1. Keywords and logical operators used.

Gender		COVID-19		Work
Gender		COVID-19		Work*
Or		Or		Or
Sex		COVID		Job*
Or	And	Or	And	Or
Woman		SARS-CoV-2		Labor
Or		Or		Or
Women		Coronavirus		Employ*
Or		Or		Or
Female		Pandemic		Unemploy*

Then, we used the logical operator “AND” to combine domains and “OR” to include keywords in each domain to run a query string searching in titles, abstracts, and keywords⁴.

This first search retrieved 17,707 documents. We applied filters to identify the most relevant documents. First, we considered papers published starting from 2020, the year of the outbreak of the COVID-19 pandemic. Second, we discarded papers not written in English. Third, according to the multidisciplinary aim of the review, we included papers in the following Scopus areas: business, management and accounting, economics, econometrics and finance, and social sciences. Fourth, to guarantee the high quality of the review, we included only papers published in journals of the first quartile of Scimago Journal & Country Rank. In the end, 773 papers were eligible for the screening phase.

Screening the title, the abstract, and the keywords of papers, we manually selected only those that focus on at least one of the five dimensions of the working conditions mentioned in the previous sections. Likewise, we excluded documents focusing on specific regions or countries. Indeed, we reviewed only papers focusing on a worldview of the phenomenon under investigation and set aside country-specific effects.

In the end, we obtained 56 documents (see Figure 1 for the flow chart of our process). We are confident that the findings of these papers offer a valuable overview of the COVID-19 pandemic’s effects on women’s working conditions.

Identification of studies via Scopus			
	NUMBER OF PAPERS INCLUDED	NUMBER OF PAPERS EXCLUDED	SELECTION CRITERIA
	Records identified from Scopus search, only query string (n = 17,707)		
Identification	Records identified by the Scopus filters applied (n = 1,713)	Records marked as out of research areas by automation tools (n = 15,994)	Scopus filters: Only published after 2019 Only article written in English Areas: Business, Management and Accounting; Economics, Econometrics and Finance; Social Sciences.
	Eligible papers for the screening (n= 773)	Papers published in non-top Scimago Journals ranking (n= 940)	We include only papers published in the first quartile of Scimago Journals ranking (Q1).
Screening	Papers included by screening process (n= 129)	Papers excluded by screening process (n= 644)	We include only papers about at least one of the five working conditions' dimensions.
	Papers included in our review (n= 56)	Paper excluded by our review (n= 73)	We reviewed only papers focusing on a worldview of the phenomenon under investigation and set aside country-specific effects.
Included			

Figure 1. Systematic Literature Review process.

4. Main Findings

The tables below summarize the main features of 20 crucial papers, which are meaningful examples of studies we included in the review. This sheds light on the heterogeneity of the emerging literature in terms of the dimension(s) of working conditions that they investigate (Table 2), research methods (Table 3), and funding agencies (Table 4).

Table 2. Geographical areas and working condition dimensions studied in the papers. Legend: Ho_Fam (the unequal distribution of household management and childcare); Wom_Job (women's job losses and income reductions); Mod_W (modality of working); W_H (working hours); MH (mental health).

Paper	Geographical Areas	Working Condition Dimensions
(Adams-Prassl et al. 2020)	UK, US, Germany	Wom_Job; Ho_Fam.
(Brodeur et al. 2021)	Global perspective	Wom_Job; Mod_W; W_H; MH.
(Cheng et al. 2021)	UK	Ho_Fam; MH.
(Chung et al. 2021)	UK	Mod_W.
(Cook and Grimshaw 2021)	Europe (German, Italy, Norway, UK)	Wom_Job.
(Craig 2020)	Australia	Ho_Fam; Mod_W.
(Craig and Churchill 2021a)	Australia	Ho_Fam; Mod_W; W_H.
(Güney-Frahm 2020)	Switzerland, Turkey, and Germany	Ho_Fam; Wom_Job.
(Heggeness 2020)	US	Wom_Job; W_H; MH.
(Hipp and Bünning 2021)	Germany	Ho_Fam.
(Htun 2022)	US	W_H.
(Kikuchi et al. 2021)	Japan	Mod_W.
(Kim et al. 2022)	US	Ho_Fam; Wom_Job.
(Kreyenfeld and Zinn 2021)	Germany	Ho_Fam.
(Kuhn et al. 2021)	Switzerland	Ho_Fam; Wom_Job; Mod_W; MH.
(Reichelt et al. 2021)	US, Germany, Singapore	Mod_W; W_H.
(Vuga Beršnak et al. 2021)	Slovenia	Ho_Fam; W_H.
(Yamamura and Tsustsui 2021)	Japan	Ho_Fam; Mod_W.
(Zamarro and Prados 2021)	US	Ho_Fam.
(Zoch et al. 2021)	Germany	Ho_Fam; Mod_W.

Table 3. Sample size and methods used by each paper.

Paper	Sample Size	Methods
(Adams-Prassl et al. 2020)	US: 1° Wave, 4003, 2° Wave 4000; UK: 3974 1° Wave; 4931 2° Wave; Germany: 4002	Longitudinal study
(Brodeur et al. 2021)	No sample	Literature Review
(Cheng et al. 2021)	15,500 participants	Longitudinal study
(Chung et al. 2021)	692 couples	Cross-sectional study
(Cook and Grimshaw 2021)	No sample	Comparative analysis (Welfare regimes)
(Craig 2020)	3000 participants	Cross-sectional study
(Craig and Churchill 2021a)	2722	Cross-sectional study
(Güney-Frahm 2020)	No sample	Secondary data analysis and interviews
(Heggeness 2020)	60000 households	Longitudinal study
(Hipp and Bünning 2021)	4400	Cross-sectional study
(Htun 2022)	No sample	Secondary data analysis
(Kikuchi et al. 2021)	LFS, 40,000; MLS, 33,000; ESS, 490,000.	Longitudinal study
(Kim et al. 2022)	Only aged 25–54	Longitudinal study
(Kreyenfeld and Zinn 2021)	Not clear	Longitudinal study
(Kuhn et al. 2021)	8782 persons from 5540 households	Longitudinal study
(Reichelt et al. 2021)	5008	Cross-sectional study
(Vuga Beršnak et al. 2021)	394	Cross-sectional study
(Yamamura and Tsustsui 2021)	11,867	Longitudinal study
(Zamarro and Prados 2021)	26,052	Cross-sectional study
(Zoch et al. 2021)	17,000	Longitudinal study

Table 4. Funding text stated by authors in Scopus for each paper.

Paper	Funding Text
(Adams-Prassl et al. 2020)	ECONCIA20-21-09; UK Research and Innovation, UKRI: ES/V004042/1; Economic and Social Research Council, ESRC; University of Oxford; Universität Zürich, UZH
(Brodeur et al. 2021)	
(Cheng et al. 2021)	Economic and Social Research Council, ESRC; Health Foundation; University of New South Wales, UNSW
(Chung et al. 2021)	
(Cook and Grimshaw 2021)	Economic and Social Research Council, ESRC: ES/V009370/1
(Craig 2020)	Australian Research Council, ARC: FT150100067
(Craig and Churchill 2021a)	
(Güney-Frahm 2020)	
(Heggeness 2020)	
(Hipp and Bünning 2021)	Bundesministerium für Bildung und Forschung, BMBF: 01UG1806
(Htun 2022)	National Science Foundation, NSF: 1624871; Norges Forskningsråd: 250753
(Kikuchi et al. 2021)	University of Tokyo; Research Institute of Economy, Trade, and Industry, RIETI
(Kim et al. 2022)	
(Kreyenfeld and Zinn 2021)	
(Kuhn et al. 2021)	
(Reichelt et al. 2021)	CG001
(Vuga Beršnak et al. 2021)	
(Yamamura and Tsustsui 2021)	18KK0048; Japan Society for the Promotion of Science, KAKEN
(Zamarro and Prados 2021)	University of Southern California, USC
(Zoch et al. 2021)	

As stated in the introduction, the papers included in this review explore one or more of the five dimensions of women's working conditions during the COVID-19 pandemic. Accordingly, we illustrate their findings into five sub-sections: the unequal distribution of caregiving and household work in families, women's job losses and income reductions, the modality of working (with a focus on the effect of remote working), women's working hours (paid and unpaid), and the psychological conditions of women during the pandemic.

4.1. The Unequal Distribution of Family Burdens

In line with social role theory, women are expected to allocate more time than men to unpaid childcare and household management (Bahn et al. 2020). This has repercussions on gender inequality in retributions; indeed, women are more likely to spend their time on childcare and household management at the expense of paid work that maximizes family income (Heggeness 2020).

Such a situation often manifests in normal times; however, the COVID-19 pandemic worsened it (Zoch et al. 2021). School closures, mandatory remote working, and unavailability of external childcare providers increased family burdens in childcare and household management. Depending on the types and severity of government restrictions, these effects likely differ across countries. However, it is reasonable to expect Western countries, similarly affected by the pandemic, to share similar trends.

Both men and women are affected by the increase in family burdens, but the growth was higher for the latter (Chung et al. 2021; Kreyenfeld and Zinn 2021; van Tienoven et al. 2021; Vuga Beršnak et al. 2021). Two similar studies conducted in Australia and Italy corroborate these mentioned findings. In Australia, during the lockdown, daily time on housework and household management was about 45 min higher for men and almost an hour higher for women. Notwithstanding that both men and women were doing more housework and household management, the relative gender gap in these activities remained constant at 22% across the period (Craig and Churchill 2021a, p. 71). Similarly, in Italy, while both men and women are spending more time on household management and childcare, the distribution is unequal: with 68% of women spending more time in household

management vs. 40% of men, while the percentages for childcare were respectively 61% and 51% (Del Boca et al. 2020, p. 1005).

Moreover, men took advantage of their long-lasting (unwritten) right to decide how to spend their spare time between childcare and the household. Craig and Churchill (2021b) found that, during the COVID-19 pandemic, men were more likely to spend their spare time on childcare instead of household management. Instead, mothers were expected to perform both kinds of tasks. Overall, this evidence showcases the well-known unbalance of women's power in families (Craig and Churchill 2021b).

In families with children, the effects of COVID-19 are worse than in others (Günther-Bel et al. 2020), with mothers suffering more than fathers from the increase in family burdens (Petts et al. 2021). Notably, studies observed that the worst effect is on mothers of children aged 6–14 who need strong home-school support (Cheng et al. 2021).

Due to the closures of schools, women have to help children with remote learning and homework (Huebener et al. 2021; Petts et al. 2021).

To sum up, scholarly research shows that there is an unequal distribution of caregiving and household work in families, in which women were soaking up much of the increase in family burden.

4.2. Women's Job Losses and Income Reductions

Generally speaking, women suffered more than men from the COVID-19 effects in terms of job losses and income reductions, although these phenomena vary across countries and industries (Brodeur et al. 2021; Clark et al. 2021; Couch et al. 2021; Graeber et al. 2021; Kikuchi et al. 2021)⁵. Reichelt et al. (2021) reported on women's job losses in the U.S, Germany, and Singapore. They found that women were 3% more likely, on average, to lose their job during the pandemic. Moreover, women are also more pessimistic about their future career opportunities and expectations (Czymara et al. 2021; Dang and Viet Nguyen 2021; Salas-Nicás et al. 2021).

It is essential to acknowledge that many women left their jobs voluntarily during the COVID-19 pandemic. Multiple reasons may account for this phenomenon. One of the most cited is in the realm of the social role theory and refers to the gendered division of childcare and household management. On average, in dual-earner couples, women earn less than men because of the gender pay gap⁶. Thus, many women leave their jobs to face increased family burdens (Craig 2020; Hipp and Bünning 2021). In so doing, they reduce expenses related to family care (e.g., babysitting), thus "maximizing" (Heggeness 2020). The pandemic caused a severe shortage of formal and informal external childcare providers (e.g., babysitters, grandparents). This forced women to voluntarily resign to take care of their kids (Zamarro and Prados 2021). Scholars noted that women's resignations during the pandemic often depended on their marital or motherhood status and the increased family burdens (Kim et al. 2022). However, single women resigned more than men in the same situation, being less motivated to continue their professional tasks. Scholars offered multiple explanations for this evidence. The most important one is mental health issues resulting from social isolation caused by policy restrictions and exacerbated by the social pressure women suffer to create families, which were harder to meet because of social distancing (Gao and Sai 2020).

School closures were associated with a decrease in women's employment (Çoban 2022). Thanks to the provision of hybrid or fully present schooling, the unemployment rate is shrinking, and we are slowly returning to normality (Collins et al. 2021).

It is important to stress that the shortage in childcare can explain voluntary job loss and involuntary job loss. One of the most cited articles in our review states that the closure of schools and nurseries has revealed the fragility of women's participation in the paid economy [...]. Additional caring responsibilities reduce productivity, meaning women are more likely to be furloughed or passed over for promotion, which could affect lifetime incomes [...] (Power 2020, pp. 68–69). Women's reasons behind voluntary and non-voluntary job losses during the pandemic often overlap.

In particular, another factor contributing to women's job losses and income reductions relates to the horizontal gender segregation across industries (e.g., [Blau and Winkler 2021](#)). More women than men work in the healthcare industry. Those workers were directly involved in fighting the pandemic, thus facing severe challenges ([Chen and Chen 2021](#)). Many women left their jobs because of the adverse mental health consequences they endured ([Cook and Grimshaw 2021](#)). Burnout—a prolonged response to chronic emotional and interpersonal stressors on the job, defined by the three dimensions of exhaustion, cynicism, and inefficacy ([Maslach et al. 2001](#), p. 397)—is a telling example. Others decided to resign due to the impossibility of balancing their professional and family life; this also holds for single women working in healthcare industries and not having partners to share household management with ([Htun 2022](#)).

Furthermore, many industries suffer more than others due to restrictive policies implemented to deal with the pandemic (e.g., social distancing and closures). Female workers are over-represented in some industries, such as accommodation, food services, and retail ([Cook and Grimshaw 2021](#)). In many countries, firms working in these industries had to stop operations during the most challenging periods of the pandemic. Consequently, many women were fired because of closures or lack of demand in these sectors. These industries often have human resources issues such as precariousness, regulation issues (e.g., unfair contracts), or seasonality ([Guha et al. 2021](#); [Villarreal and Yu 2022](#)).

4.3. *The Modality of Working (with a Focus on the Effect of Remote Working)*

During the COVID-19 pandemic, many governments imposed remote working for workers who could perform their tasks from home (e.g., white collar workers, teachers, and employees in online service industries, e.g., [Brodeur et al. 2021](#)). Due to these restriction policies, women and men stayed home much more than ever ([Craig and Churchill 2021a](#)). [Angelici and Profeta \(2020\)](#) noted that working from home increases men's participation in domestic work during regular times and COVID-19. In addition, even once these restrictions were softened, many organizations believe that implementing new work modalities does pay off, and neither employers nor employees want to return to pre-pandemic conditions (see again [Brodeur et al. 2021](#)). This situation affects households because partners and children have to share domestic spaces for different tasks ([Dunatchik et al. 2021](#)).

However, the empirical evidence from many countries during the COVID-19 pandemic shows an unequal distribution of domestic work between men and women involved in remote working, with much higher percentages for women. In the line of social role theory, this may reflect social expectations that women are those who carry family burdens. Nevertheless, studies showed that the gender gap does exist in remote working ([Waismel-Manor et al. 2021](#)). To deal with the increased family pressures, women chose to work remotely more than men. Hence, during the pandemic, the gendered division of roles affected the working modality, inducing women to work from home.

It is finally worth noting that in many countries with different levels of human development (i.e., very high, high, medium, and low levels, according to the World Bank Human Development classification⁷), women are more likely to work from home than men ([Collins et al. 2021](#); [Del Boca et al. 2020](#); [Gottlieb et al. 2021](#); [Reichelt et al. 2021](#); [Zamarro and Prados 2021](#)).

4.4. *Working Hours*

According to [Collins et al. \(2021\)](#), mothers helped their children with homework and school matters more than fathers did during the pandemic. Therefore, gender inequalities among parents in allocating time to their children's education exist in the US (and likely worldwide). This is another aspect of the social role theory, which came to the limelight during the pandemic: mothers appeared to be taking on a more significant burden of childcare and home-schooling at the expense of their paid work time. The more substantial reduction in mothers' working hours compared with fathers (see again [Collins et al. 2021](#)) supports this claim.

The trend identified is that the decrease in paid working hours is higher for mothers of children whose home-schooling demands are more intense (Yamamura and Tsustsui 2021), namely for children aged 6 to 12 (Yavorsky et al. 2021). This phenomenon relates to the mothers' increased likelihood to help children with school homework and other obligations compared to fathers. In other words, although both mothers and fathers stayed at home more during the pandemic than before, the former spent more time doing homework with children. To our knowledge, we did not find specific evidence for mothers of younger children. Moreover, from the literature, it emerged that the mothers' effort required by teenagers (12 years or older) during the pandemic is negligible (Yamamura and Tsustsui 2021).

While paid working hours for women decreased, unpaid domestic work increased (Bahn et al. 2020; Craig and Churchill 2021a; Del Boca et al. 2020). During the pandemic, instead of working less, women often worked more and differently than before.

Another issue concerns women who have to carry out the family chores at the expense of their careers. These women must balance household management, caring responsibilities, and small paid work tasks (Gottlieb et al. 2021; Nash and Churchill 2020). These conditions are unfavorable for women's working performance, especially those with school-age children (Nguyen 2021). During the pandemic, we observed this issue in two different ways, with both disadvantaging women. First, women tended to put their careers aside to allocate more hours to childcare. Second, those who were persistent in their careers overlooked their family duties. To conclude, during the pandemic, women's working hours either decreased to maximize their family effort or increased because of increased hours spent in unpaid domestic work and professional activities.

4.5. Mental Health

Women are more likely than men to work in industries hit directly by the pandemic (e.g., the healthcare industries) and in those hit by the restrictions (e.g., accommodation and food service, Yavorsky et al. 2021). Accordingly, they suffered more than men from the effect of COVID-19, not only in their economic spheres but also in their health (Behar-Zusman et al. 2020).

Regarding health issues, it is essential to distinguish between mothers and women without children because their risks differ, particularly regarding their psychological conditions (Cheng et al. 2021). For instance, scholars studying this topic agree that, during the pandemic, mothers were as concerned as men about family income issues but were more concerned about children's future perspectives (Czymara et al. 2021).

Studies from several countries showed that mothers were more likely than fathers to experience burnout (e.g., Aldossari and Chaudhry 2021; Huebener et al. 2021). Scholars concur in confirming that, during the pandemic, burnout experienced by women was a direct consequence of the combination of their work duties and increased family burdens (e.g., Fuller and Qian 2021; Pereira 2021; Yamamura and Tsustsui 2021). In their daily life, women are expected to deal with professional tasks, childcare, and household management; the literature refers to this phenomenon as multitasking (Craig and Churchill 2021c). Social expectations of multitasking affect women's psychological conditions. Notably, the image of the working-fit-mother overwhelms women, with obvious consequences on mental health (Güney-Frahm 2020).

Single women without children have suffered more damage to their psychological health than men in the same situation (Kuhn et al. 2021). The reasons why this phenomenon affects women more than men—according to existing literature—are the risk of isolation, uncertainty about income, their role as caregivers (e.g., for their elderly parents), and the burdensome social expectation of creating a family (Gao and Sai 2020).

5. Future Research Directions, Limitations, and Practical Implications

This study reviewed the literature on women's working conditions during the COVID-19 pandemic, using social role theory as a guiding theoretical framework. In so doing,

we unearthed several research gaps that open promising avenues for future research. We believe that this aspect is the main contribution of our work.

In this literature review, we observed that most papers on women's working conditions during the COVID-19 pandemic studied the conditions of women in couples and families and the effect of childcare on mothers during school closures. Accordingly, we welcome research on single women, particularly elderly ones. Indeed, these latter suffered the most from social isolation and restrictions and likely had direct health consequences from the pandemic.

Considering the literature findings, we can state that the COVID-19 crisis differs from previous ones (e.g., the 2011 Great Recession, as confirmed in [Brodeur et al. 2021](#)). The pandemic negatively affected more female-dominated industries than male-dominated ones. The female workers in these industries are involved in different ways. For instance, female accommodation and food service workers suffered mostly from restriction policies, mainly causing involuntary job losses. At the same time, female workers in healthcare industries suffered from massive workloads (with health and mental health consequences) due also to the lack of workforce. However, what happened in other industries and male-dominated ones? Are women more likely than men to be fired, in line with the social expectation of men as the breadwinners? This is an undoubtedly exciting question.

To the best of our knowledge, few studies have tried to understand the effects of the pandemic on all the dimensions of women's working conditions. Similarly, we found no studies about necessity entrepreneurship, namely that women who lost their job during the pandemic can earn a living by starting a business. Furthermore, our review did not cover some novel and interesting phenomena. These include (but are not limited to) the so-called platformed labor, which is currently attracting many types of workers, ranging from riders to sex workers.

Finally, we need to learn more about COVID-19's psychological effects on children and how this phenomenon creates further disadvantages in women's working conditions.

The study has some limitations. First, we take a global perspective, which allows us to depict a worldwide picture of the phenomenon under investigation. Although we view such a perspective as a necessary starting point in systematizing this emerging literature, we recognize the importance of local culture in gender research and welcome future studies focusing on specific geographical areas. Second, we use the social role theory as a conceptual framework, which systematizes our research. We welcome studies that refer to other approaches, such as feminist theories. Third, we included papers (written in English) in the first quartile of the Scimago journal ranking of the Scopus database. This exposes us to the risk of missing some relevant contributions published in lower-ranking journals and journals included in other databases (e.g., ISI Web of Knowledge). Fourth, we disregarded the network of citations of the included papers. What is the structure of their citation networks? Which papers do the papers included in the literature review cite? Are there cross-citations among the papers? This may offer exciting insights into the roots and evolutions of the knowledge base on women's working conditions during the COVID-19 pandemic.

Despite these limitations, the paper offers appealing implications for academics and practitioners. These implications are highly salient in periods of adversity, such as the pandemic, but also apply to normal times. As to the implications for academic research, the paper systematizes extant literature, sheds light on its gaps, and, thus, proposes an agenda for future research. As to the practitioners, it might offer insights on how to improve women's working conditions in crisis times to relevant stakeholders (e.g., top executives and policymakers). Indeed, they are called upon to design policies allowing women to achieve work–life balance, maintain their jobs, take advantage of remote working, and improve their mental health.

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Notes

- ¹ International Labor Organization, 2021, Official Website; <https://www.ilo.org/global/lang--en/index.htm>, accessed on 25 October 2022.
- ² Eurofound, 2011, <https://www.eurofound.europa.eu/observatories/eurwork/industrial-relations-dictionary/workingconditions>, accessed on the 25 October 2022.
- ³ The Scopus database is (<https://www.scopus.com>, accessed on the 1 September 2022) one of the best databases recording scientific publications.
- ⁴ The query string is TITLE-ABS-KEY (gender OR sex OR woman OR women OR female AND COVID OR COVID-19 OR SARS-CoV 2 OR coronavirus OR pandemic AND work* OR job* OR labor OR employ* OR unemploy*).
- ⁵ The literature offered various insights into this evidence. For instance, in the US and UK, women and workers without a college degree are significantly more likely to experience a fall in their earnings [...]. In the US and the UK, women were 6.5% and 4.8% more likely to lose their jobs (Adams-Prassl et al. 2020, p. 9).
- ⁶ European Commission, 2022 Report on gender equality in the EU, European Union, Brussels, 2022. Available at https://ec.europa.eu/info/sites/default/files/aid_development_cooperation_fundamental_rights/2022_report_on_gender_equality_in_the_eu_en.pdf, accessed on 31 October 2022.
- ⁷ Classification description available to the World Bank official website <https://datahelpdesk.worldbank.org/knowledgebase/articles/378834-how-does-the-world-bank-classify-countries>, accessed on the 1 September 2022.

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