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Relationship between employment changes and psychosocial discomfort during the COVID-19 pandemic

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ABSTRACT

Due to the COVID-19 pandemic and the containment and prevention measures established at the global and national level, daily life activities were affected, deepening inequities in Chile and impacting the population's mental health. The study's objective was to analyze the relationship between working conditions and psychological distress during the COVID-19 pandemic in Chile. For this, a cross-sectional study was implemented using an anonymous and self-administered online questionnaire, reaching a final sample size of 784 people ≥18 years. The questionnaire explored sociodemographics, work, income, and psychological distress information. We computed logistic regression models to assess risk factors associated with psychological discomfort. Data showed that higher percentage of women dedicate more hours per week to household chores, caring for other people, and accompanying schoolwork than men. More than half of the participants (55%) reported psychological discomfort, with household income reduction as the main risk factor. Our results reflect the impact of the COVID-19 pandemic in Chile, with a severe decrease in household income, a risk factor for psychological discomfort. It is important to implement strategies to protect mental health during health emergencies, considering more vulnerable populations.

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1. INTRODUCTION

The Coronavirus 2019 pandemic (COVID-19) and the containment and mitigation measures implemented in different countries remarkably impacted the population's economic, employment, and psychosocial conditions [1], [2]. As with other health crises, the COVID-19 pandemic has generated a high burden of depression, anxiety disorders, stress, panic attacks, somatization disorder, sleep disorders, emotional disturbance, post-traumatic stress disorder (PTSD) symptoms, and suicidal behavior, among other mental health problems [3]. However, the impact of the COVID-19 pandemic has not been homogeneous across all population groups. Several socio-economic factors were associated with mental health problems. Overall, many studies agreed that younger age [4], being a woman, and unemployment were related to

mental health outcomes [3]. In fact, the COVID-19 pandemic widened existing inequalities, especially in the most socioeconomically vulnerable groups [5].

Due to the lockdown, many jobs and economic opportunities were lost unexpectedly, increasing economic concerns and mental health [6], [7]. On the other side, many people who could work from home faced difficulties balancing work and family tasks, including supporting homeschooling [8]. This situation may have accentuated some gender inequalities presented before the pandemic, such as the distribution of time and workload devoted to unpaid work and its relationship with mental health [9]. Globally, women are still considered responsible for unpaid work, including responsibilities and tasks done to maintain a household and its family members, without explicit monetary compensation [10]. On average, women spend 3–6 hours per day on unpaid work, while men contribute 0·5–2 hours [11]. Although women's participation in the labor market has increased, many combine this unpaid work with paid employment [7], with the total working time being more outstanding for women than for men. This role conflict and role overload can affect psychological well-being [9].

The changes in working modalities due to COVID-19, which forced employees to work from home in some cases or reduce salaries, may have affected health outcomes because of several work factors, such as social connectedness and work-family conflict [12]. Although some studies have reported a negative impact on the mental health of certain groups of workers during COVID-19, few studies, especially in Latin America, have reported how work changes, including the workload of paid and unpaid work, have affected the mental health of the general population, and whether this association was different by gender. Considering this, our study analyzed the relationship between labor and employment changes and the psychosocial discomfort during the COVID-19 pandemic in Chile. The results provide information on how the changes in employment, considering paid and unpaid work during the COVID-19 pandemic, have unequally affected the population and how this has impacted mental health. It will reinforce the consideration of a broader perspective in implementing programs in the context of health crises, including the role of social determinants to protect the health of the most vulnerable groups and reduce health inequalities.

2. METHOD

This study is part of a collaborative initiative named TIARA-Study, initially implemented by researchers from CEDES (unit associated with CONICET), Argentina, in 2020 with the aim of analyzing the psychosocial impact of COVID-19 and the mitigation and contingency measures, as well as the coping strategies implemented by the general population. After that, the initiative was expanded to generate a multicenter project in Bolivia and Chile [13] using the same methodology and main instruments adapted to each context. This paper reports the results of the study implemented in Chile during 2020.

2.1. Design and setting

A cross-sectional study was implemented in 2020, inviting the population over 18 to complete an anonymous online survey. At the time of the study, Chile had restrictions on the mobility and transit of people, ensuring compliance with quarantines and isolation measures, according to the "Step by Step plan", which was designed as a gradual deconfinement strategy. Also, at this time, the National COVID-19 Vaccine Plan began (December 2020), starting vaccination of priority groups such as health personnel and vulnerable groups [14].

2.2. Instrument, procedure, and variable definition

From November 20th to December 31st, 2020, we invite the population, through social networks and official institutional communication channels (Universidad de O'Higgins), to complete an online questionnaire through the SurveyMonkey® platform (SurveyMonkey, San Mateo, CA). The survey included instructions on how to fill out the questionnaire, the research objectives, and contact information in case of doubts or questions. Before completing the survey, the participants read and gave informed online consent on the same platform. The participation was anonymous, voluntary, and without economic incentives for their involvement in the study. Only those who agreed to participate continued with the questionnaire.

We used an adapted version of the TIARA-Study questionnaire, which explored the impact of the pandemic on various aspects of life, concerns, and main coping measures [15]. The questions were adapted to the Chilean context, and questions about paid and unpaid work were included. Sociodemographic variables included gender (male, female, and other), age (between 18 to 30, 31 to 50, and over 50 years old), health insurance (public, private, and other), household income (equivalent to USD; less than 360, between 361 and 1,442 and more than 1,442) and changes in household income (increase, no change, and reduction).

Concerning employment and working conditions, we explored changes in working hours (increase, no change, and reduction) and the practice of teleworking or remote work (yes/no). We used questions from the National Time Use Survey, Chile (ENUT), to explore hours per week of unpaid work (up to 15, between 16 to

45 and more than 45) dedicated to household chores, home maintenance and repairs, caring for other people (child, people elderly and people in a situation of dependency) and accompaniment of school tasks [16].

Psychological discomfort was measured through the K-10 questionnaire proposed by Kessler and validated in Spanish [17]. This instrument has ten questions about symptoms of depression with answers on a 5-point Likert scale from never to always. A cut-off point of 24.5 points was considered for moderate/severe psychological discomfort [18]. The instrument included 80 questions and took approximately 16 minutes to complete.

2.3. Data analysis

Absolute (n) and relative frequencies (%) were calculated for all categorical variables. For the bivariate analysis, the Chi-square test was used to detect statistically significant differences according to gender. Logistic regression models were computed to evaluate the association between gender, social, and work factors with psychological discomfort. Crude and adjusted odds ratio (OR) were computed considering a 95% confidence interval (95% CI). Because of the small number of participants with gender recorded as Other, this category was excluded from the multivariate analysis. All statistical analyses were performed using IBM SPSS V. 26.

3. RESULTS AND DISCUSSION

During the study period, 1,133 persons responded to the survey. Of these, 349 surveys were excluded because of incomplete data. Of the total of valid responses (N = 784), most of them were female (80%), with an age range between 31 to 50 years (46%), with public health insurance (62%), and monthly income between 361-1442 USD (47%). Men reported a significantly higher percentage of young people, participants enrolled in private health insurance, and participants with higher income than female participants as shown in Table 1.

Table 1. Sociodemographic characteristics of the study population according to gender

Variables		Total (N = 784)		Men (N = 142)		Female (N = 629)		Other (N = 13)		p-value*
		n	%	n	%	n	%	n	%	
Age (years)	18-30	221	28.3	42	29.8	171	0.3	8	61.5	<0.05
	31-50	358	45.8	70	49.6	284	45.2	4	30.8	
	≥51	203	26.0	29	20.6	173	27.5	1	7.7	
Health insurance	Public	487	62.1	68	47.9	409	65.0	10	76.9	<0.05
	Private	253	32.3	61	43.0	191	30.4	1	7.7	
	Other	44	5.6	13	9.2	29	4.6	2	15.4	
Income (USD)	≤360	96	14.0	8	6.3	86	15.7	2	25.0	<0.05
	361-1442	320	46.8	51	39.8	266	48.5	3	37.5	
	≥1,443	268	39.2	69	53.9	196	35.8	3	37.5	

*Chi-squared test

3.1. Changes in employment situation and unpaid work

Of the total number of respondents, more than half (52%) reported doing teleworking or remote work, and the majority informed having reduced work hours (41%) and income (57%), without statistically significant differences by gender. Regarding unpaid work, women reported higher time (>45 hr/week) dedicated to household chores (20 Vs. 7%; p-value 0.001), caring for other people (44 Vs. 26%; p-value 0.002), and accompanying school tasks (6 Vs. 1%; p-value 0.001) in comparison with men. Although men reported a higher percentage of teleworking (58 Vs. 50%; p value 0.135), a greater increase in working hours (41 Vs. 39%; p-value 0.697), a greater reduction in household income (9 Vs. 6%; p-value 0.135), and a greater workload dedicated to maintenance and repair tasks (45 hr/week; 2.9 Vs. 2.5%; p-value 0.816) compared to women, these differences were not statistically significant as shown in Table 2.

More than half of the participants (n = 403; 55%) reported moderate/severe psychological discomfort. Among the factors that showed a greater probability of presenting psychological discomfort were being a woman (OR = 1.82; 95% CI 1.3-2.6), lower income (2.76; 1.7-4.5), not doing teleworking (1.59; 1.1-2.3), reduction in work hours (1.55; 1.0-2.3), and reduction in household income (4.52; 2.2-9.3) in comparison with their reference categories. On the other hand, older people were less likely to report psychological discomfort than the younger group (0.51; 0.3-0.8) as shown in Table 3. In the adjusted model, only age group, household income, and changes in income maintained their statistical significance. People who spend between 16 to 45 hours/week on household chores were less likely to present psychological distress (0.49; 0.2-1.0) than those who dedicate fewer hours to these tasks as shown in Table 3.

Table 2. Description of changes in the employment situation and hours of unpaid work according to gender

Variables	Categories	Total (N = 784)		Men (N = 142)		Female (N = 629)		Other (N = 13)		p-value*
		n	%	n	%	n	%	n	%	
Telework	Yes	259	52.0	60	58.3	197	50.1	2	100	0,135
	No	239	48.0	43	41.7	196	49.9	0	0	
Changes in hours worked	Increase	194	39.8	42	40.8	151	39.4	1	50.0	0.697
	Without changes	95	19.5	24	23.3	71	18.5	0	0	
	Reduction	199	40.8	37	35.9	161	42.0	1	50.0	
Changes in household income	Increase	383	57.1	64	50.4	315	58.7	4	57.1	0.315
	Without changes	246	36.7	51	40.2	192	35.8	3	42.9	
	Reduction	42	6.3	12	9.4	30	5.6	0	0	
Unpaid work										
Household chores (hr/week)	≤15	127	23.7	41	35.7	84	20.2	2	33.3	0.001
	16-45	317	59.1	66	57.4	247	59.5	4	66.7	
	>45	92	17.2	8	7.0	84	20.2	0	0	
Home maintenance and repairs (hr/week)	≤ 15	392	83.9	85	81.7	301	84.3	6	100	0.816
	16-45	63	13.5	16	15.4	47	13.2	0	0	
	>45	12	2.6	3	2.9	9	2.5	0	0	
Caring for other people (hr/week)*	≤15	196	48.6	53	57.0	137	45.1	6	100	0.002
	16 - 45	49	12.2	16	17.2	33	10.9	0	0	
	>45	158	39.2	24	25.8	134	44.1	0	0	
Accompaniment of school tasks (hr/week)	≤15	303	65.7	84	83.2	214	60.5	5	83.3	0.001
	16-45	135	29.3	16	15.8	118	33.3	1	16.7	
	>45	23	5.0	1	1.0	22	6.2	0	0	

* It includes hours per week of care for children from 0 to 14 years old, older adults, and people in a situation of dependency
** Chi-squared test

Table 3. Crude and adjusted Odds Ratio (95% CI) for psychological discomfort (N = 732)

Variables		Psychological discomfort (Moderate/Severe) (N = 403)*					
		n	%	OR	IC 95%	ORa	IC 95%
Gender	Male	59	42.8	1		1	1
	Female	337	57.6	1.82	1.3-2.6	0.83	0.4-1.6
	Other	7	77.8	4.69	0.9-23.4	-	-
Age group (years)	18-30	136	67.7	1		1	
	31-50	166	49.4	0.47	0.3-0.7	0.34	0.2-0.8
	>50	100	51.8	0.51	0.3-0.8	0.24	0.1-0.6
Income	≤360	119	44.4	1		1	
	361-1,442	197	61.6	2.00	1.4-2.8	2.8	1.6-5.0
	≥ 1,442	66	68.8	2.76	1.7-4.5	1.22	0.4-4.2
Telework	Yes	123	47.5	1		1	
	No	141	59.0	1.59	1.1-2.3	1.35	0.7-2.7
Changes in hours worked	Increase	96	49.5	1		1	
	Without changes	41	43.2	0.78	0.5-1.3	0.41	0.2-0.9
	Reduction	120	60.3	1.55	1.0-2.3	0.96	0.4-2.1
Changes in household income	Increase	11	26.2	1		1	
	Without changes	123	50.0	2.82	1.4-5.9	3.95	1.1-14.0
	Reduction	236	61.6	4.52	2.2-9.3	3.7	1.0-13.6
Household chores (hr/week)	≤15	73	57.5	1		1	
	16-45	164	51.7	0.79	0.5-1.2	0.49	0.2-1.0
	>45	60	65.2	1.39	0.8-2.4	1.07	0.4-2.9
Home maintenance and repairs (hr/week)	≤15	213	54.3	1		1	
	16-45	37	58.7	1.2	0.7-2.1	1.74	0.7-4.4
	>45	8	66.7	1.69	0.5-5.7	0.28	0.0-2.6
Caring for other people (hr/week)	≤15	110	56.1	1		1	
	16-45	25	51.0	0.81	0.4-1.5	0.91	0.4-2.3
	>45	85	53.8	0.91	0.6-1.4	1.27	0.6-2.5
Accompaniment of school tasks (hr/week)	≤15	164	54.1	1		1	
	16-45	76	56.3	1.09	0.7-1.6	1.06	0.5-2.1
	>45	17	73.9	2.4	0.9-6.3	2.58	0.5-13.4

*A cut-off point of 24.5 points for psychological distress was considered

The study aimed to explore the association between changes in employment status, including paid and unpaid workload, and high levels of psychological distress during the COVID-19 pandemic in Chile. The results showed that younger age groups, people with lower incomes, and those who reported a reduction in their household income during this period were more likely to experience psychological distress, regardless of gender. This also provides evidence of the unequal impact that COVID-19 had on different age groups, reinforcing the need for more targeted interventions for these groups.

In our study, more than half of the participants (55%) reported high psychological discomfort. It is consistent with previous reports that analyzed the impact of the pandemic on mental health and the effect of changes in social and economic factors [19], [20]. The Tiara study implemented in Argentina, which used the same instrument (K-10), reported a percentage of moderate and severe psychological distress of 28% at the beginning of the pandemic (April 2020) [15]. Likewise, another study implemented in Saudi Arabia (December 2020 - January 2021) found that 72% of the population reported high or very high levels of psychological distress, considering a cut-off point of 16 or more points [20]. The higher percentages of psychological distress found in our study can be explained by the time elapsed and the probable exhaustion of people due to the mitigation and containment measures implemented for several months.

No changes and reduction in household income, as well as younger age, were shown to be risk factors for psychological discomfort. These results are consistent with the literature which describes the global economic impact of the COVID-19 pandemic [21]. Likewise, several studies found that younger generations and economic stressors were associated with symptoms of depression and anxiety [20], [22]. Some studies have suggested that exposure to social media exposure was associated with increased symptoms of anxiety and depression [23], with the younger population being one of the most vulnerable groups due to the more significant influence of unreliable information received through social networks [20], [24].

In our study, women were more likely to present psychological discomfort than men (58 Vs. 43%); however, this association disappeared in the adjusted model, possibly due to the more significant influence of other variables considering the study period. However, during the pandemic, have been described other factors that may have affected mainly women which could also have an effect on mental health in the medium or long term. It includes the risk of domestic violence [25], financial and job insecurity, and increased domestic workload [26].

In agreement with other studies [27], [28], our results showed a significant difference by gender in the distribution of unpaid tasks, including household chores, caring for people, and accompanying schoolwork. A recent systematic review found important gender differences in the performance of unpaid labor, emphasizing that among employed adults, a negative impact of unpaid labor was more substantial in women's mental health in comparison with men [9]. Although the mechanisms explaining the relationship between unpaid labor and mental health are not well known, they may vary depending on the context and social and cultural norms. Some explanations include the role strain theory, role conflict, and role overload due to the overload of paid work demands and a high unpaid workload [9]. This situation became more evident during the pandemic when work adaptations due to restrictions measures (e.g., remote work) happened without proper conditions, affecting the well-being of both men and women [29]. On the other hand, during the pandemic some positive changes in family dynamics have also been reported, allowing for more quality time [30], which could explain the results of our study, where we found that dedication to household chores (between 16 to 45 hr/week) has been shown to be a protective factor for psychological distress (OR 0.49; 95% CI 0.2-1.0).

Few studies have explored changes in work (paid and unpaid) and their relation with psychological discomfort during the second wave of the COVID-19 pandemic in Chile. In this sense, our study provides evidence to prioritize the approach to the most vulnerable populations during health crises. However, the study also presents some limitations that are important to recognize. The cross-sectional design makes it impossible to ensure the criterion of temporality between risk factors and psychological discomfort. At the moment of the survey, the mitigation and containment measures implemented in Chile for the COVID-19 pandemic had been in place for 8 to 9 months. Therefore, there is a possibility that psychological discomfort could affect work and income changes. A potential selection bias can be present in the study due to the limited scope of the online survey in some geographical areas, especially in those with little internet access or the availability of electronic devices. Therefore, it is impossible to generalize the results to the entire country. On the other hand, the survey fatigue reported in previous studies [31] due to the excessive amount of virtual surveys and information about COVID-19 that have circulated in social networks may have limited participation and interest in our study.

4. CONCLUSION

Our results provide evidence of the impact the COVID-19 pandemic had on different population groups in Chile, particularly on mental health. This impact is reflected in a high percentage of psychosocial discomfort, especially among women, people with a greater unpaid workload, and those who reported reduced working hours or household income. Furthermore, younger age, reduced household income, and middle-income status were identified as independent predictors of psychosocial discomfort. The results reinforce the importance of implementing comprehensive strategies to protect the mental health of the population in crisis situations or health emergencies. These strategies should consider employment changes and their economic impact during this period, as well as the impact these situations can have on family

dynamics, including the burden of unpaid work. In this way, the effect of the health contingency can be mitigated in the short and long term.

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AUTHOR CONTRIBUTIONS STATEMENT

This journal uses the Contributor Roles Taxonomy (CRediT) to recognize individual author contributions, reduce authorship disputes, and facilitate collaboration.

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C : **C**onceptualization
M : **M**ethodology
So : **So**ftware
Va : **Va**lidation
Fo : **Fo**rmal analysis
I : **I**nvestigation
R : **R**esources
D : **D**ata Curation
O : Writing - **O**riginal Draft
E : Writing - Review & **E**diting
Vi : **Vi**sualization
Su : **Su**pervision
P : **P**roject administration
Fu : **Fu**nding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

We follow national and international ethical recommendations for research with human beings, following the tenets of the Helsinki Declaration in all the study steps. This study was reviewed and approved by the Universidad de O'Higgins ethics committee (ID 005-2020). The questionnaire was completely anonymous, and voluntary participation was always respected.

DATA AVAILABILITY

The data supporting this study's findings are available from the corresponding author, [MSB], upon reasonable request.

REFERENCES

[1] R. P. Rajkumar, "COVID-19 and mental health: A review of the existing literature," *Asian Journal of Psychiatry*, vol. 52, 2020, doi: 10.1016/j.ajp.2020.102066.

[2] V. N. and E. B. M., "COVID-19 pandemic and mental health consequences: systematic review of the current evidence," *Brain, behavior, and immunity*, 2020.

[3] M. M. Hossain *et al.*, "Epidemiology of mental health problems in COVID-19: a review," *F1000Research*, vol. 9, p. 636, Jun. 2020, doi: 10.12688/f1000research.24457.1.

[4] E. A. K. Jones, A. K. Mitra, and A. R. Bhuiyan, "Impact of COVID-19 on mental health in adolescents: A systematic review," *International Journal of Environmental Research and Public Health*, vol. 18, no. 5, p. 2470, Mar. 2021, doi: 10.3390/ijerph18052470.

[5] British Medical Association, "The impact of COVID-19 on mental health in England; Supporting services to go beyond parity of esteem," *British Medical Association*, p. 9, 2020.

[6] A. Zajacova *et al.*, "Mental health and economic concerns from March to May during the COVID-19 pandemic in Canada: Insights from an analysis of repeated cross-sectional surveys," *SSM - Population Health*, vol. 12, 2020, doi: 10.1016/j.ssmph.2020.100704.

[7] L. R. Hall, K. Sanchez, B. da Graca, M. M. Bennett, M. Powers, and A. M. Warren, "Income differences and COVID-19: Impact on daily life and mental health," *Population Health Management*, vol. 25, no. 3, pp. 384–391, Jun. 2022, doi: 10.1089/pop.2021.0214.

[8] Carroll N *et al.*, "The impact of covid-19 on health behavior, stress, financial and food security among middle to high income Canadian families with young children.," *Nutrients*, vol. 12, no. 8, pp. 1–14, 2020.

[9] J. Ervin, Y. Taouk, L. F. Alfonzo, B. Hewitt, and T. King, "Gender differences in the association between unpaid labour and mental health in employed adults: a systematic review," *The Lancet Public Health*, vol. 7, no. 9, pp. e775--e786, 2022, doi: 10.1016/S2468-2667(22)00160-8.

[10] Women, *Turning promises into action: Gender equality in the 2030 agenda for sustainable development*. 2018.

[11] S. Seedat and M. Rondon, "Women's wellbeing and the burden of unpaid work," *BMJ*, p. n1972, Aug. 2021, doi: 10.1136/bmj.n1972.

[12] J. Oakman, N. Kinsman, R. Stuckey, M. Graham, and V. Weale, "A rapid review of mental and physical health effects of working at home: how do we optimise health?," *BMC Public Health*, vol. 20, no. 1, p. 1825, Dec. 2020, doi: 10.1186/s12889-020-09875-z.

[13] M. S. Burrone *et al.*, "Coronavirus and psychosocial impact in Chile," *Revista Medica de Chile*, vol. 148, no. 8, pp. 1224–1226, 2020, doi: 10.4067/S0034-98872020000801224.

[14] B. Aguilera *et al.*, *COVID-19: Evolution, effects and policies adopted in Chile and the world*, no. 28. Chile, 2022.

[15] S. Arrossi *et al.*, *Tiara studio. First preview of results*. Argentina: CEDES Digital Repository, 2020.

[16] National Institute of Statistics, "National time use survey, Chile." https://www.ine.gob.cl/enut (accessed Oct. 15, 2023).

[17] R. C. Kessler, *Kessler's 10 psychological distress scale*. Boston: Harvard Medical School, 1996.

[18] M. Aranguren and M. E. Brenlla, "Argentine adaptation of the Kessler Psychological Distress Scale (K10)," *Revista de Psicología*, vol. 28, no. 12, pp. 1–37, 2015.

[19] J. Torales, M. O'Higgins, J. M. Castaldelli-Maia, and A. Ventriglio, "The outbreak of COVID-19 coronavirus and its impact on global mental health," *International Journal of Social Psychiatry*, vol. 66, no. 4, pp. 317–320, 2020, doi: 10.1177/0020764020915212.

[20] T. A. F. Alharbi *et al.*, "COVID-19: Factors associated with the psychological distress, fear and resilient coping strategies among community members in Saudi Arabia," *Healthcare*, vol. 11, no. 8, p. 1184, Apr. 2023, doi: 10.3390/healthcare11081184.

[21] R. F. Ceylan, B. Ozkan, and E. Mulazimogullari, "Historical evidence for economic effects of COVID-19," *European Journal of Health Economics*, vol. 21, no. 6, pp. 817–823, 2020, doi: 10.1007/s10198-020-01206-8.

[22] R. L. Brown, J. A. Richman, and K. M. Rospenda, "Economic stressors and psychological distress: Exploring age cohort variation in the wake of the great recession," *Stress and Health*, vol. 33, no. 3, pp. 267–277, 2017, doi: 10.1002/smi.2705.

[23] J. Gao *et al.*, "Mental health problems and social media exposure during COVID-19 outbreak," *PLOS ONE*, vol. 15, no. 4, p. e0231924, Apr. 2020, doi: 10.1371/journal.pone.0231924.

[24] C. E. Delgado, E. A. Silva, E. A. B. de Castro, F. da C. Carbogim, V. A. de A. Püschel, and R. B. Cavalcante, "COVID-19 infodemic and adult and elderly mental health: a scoping review," *Revista da Escola de Enfermagem da USP*, vol. 55, 2021, doi: 10.1590/1980-220x-reeusp-2021-0170.

[25] Women's Aid, *The impact of COVID-19 on women and children experiencing domestic abuse, and the life-saving services that support them*. 2020. [Online]. Available: http://womensaid.org.uk/wp-content/uploads/2020/05/The-impact-of-Covid-19-on-domestic-abuse-support-services-1.pdf.

[26] C. Wenham, J. Smith, and R. Morgan, "COVID-19: the gendered impacts of the outbreak," *The Lancet*, vol. 395, no. 10227, pp. 846–848, 2020, doi: 10.1016/S0140-6736(20)30526-2.

[27] J. Gausman and A. Langer, "Sex and gender disparities in the COVID-19 pandemic," *Journal of Women's Health*, vol. 29, no. 4, pp. 465–466, 2020, doi: 10.1089/jwh.2020.8472.

[28] A. Langer *et al.*, "Women and health: The key for sustainable development," *The Lancet*, vol. 386, no. 9999, pp. 1165–1210, 2015, doi: 10.1016/S0140-6736(15)60497-4.

[29] M. Mofakhami, E. Counil, and A. Pailhé, "Telework, working conditions, health and wellbeing during the Covid crisis: A gendered analysis," *Social Science & Medicine*, vol. 350, p. 116919, Jun. 2024, doi: 10.1016/j.socscimed.2024.116919.

[30] L. Eales, G. M. Ferguson, S. Gillespie, S. Smoyer, and S. M. Carlson, "Family resilience and psychological distress in the COVID-19 pandemic: A mixed methods study.," *Developmental Psychology*, vol. 57, no. 10, Oct. 2021, doi: 10.1037/dev0001221.

[31] R. de Koning *et al.*, "Survey fatigue during the COVID-19 Pandemic: An analysis of neurosurgery survey response rates," *Frontiers in Surgery*, vol. 8, Aug. 2021, doi: 10.3389/fsurg.2021.690680.

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