

RESEARCH REPORT

Social Psychology

Editor

Raquel Souza Lobo Guzzo

Support

Fundação de Amparo à Pesquisa do Estado do Rio de Janeiro (E-26/200.517/2023); Conselho Nacional de Desenvolvimento Científico e Tecnológico (311162/2021-5).

Conflict of interest

The authors declare that there are no conflict of interest.

Data availability

The research data are openly available in the ZENODO repository at: <https://doi.org/10.5281/zenodo.19870190>.

Received

July 10, 2023

Final Version

September 17, 2024

Approved

May 15, 2025

Comparison between fathers and mothers in telework: mental health, work-family conflict, and professional development

Comparação entre pais e mães em home-office: saúde mental, conflito trabalho-família e desenvolvimento profissional

Jeane Aledi¹ , Luciana Mourão¹ 

¹ Universidade do Estado do Rio de Janeiro, Instituto de Psicologia, Programa de Pós-Graduação em Psicologia. Rio de Janeiro, RJ, Brasil. Correspondence to: L. MOURÃO. E-mail: <mourao.luciana@gmail.com>.

Article prepared based on the dissertation by J. ALEDI, entitled “*Teletrabalho: do sonho ao caos – vivências de pais e mães na pandemia*”. Universidade do Estado do Rio de Janeiro, 2022.

How to cite this article: Aledi, J., & Mourão, L. (2026). Comparison between fathers and mothers in telework: mental health, work-family conflict, and professional development. *Estudos de Psicologia* (Campinas), 43, e230071. <https://doi.org/10.1590/1982-0275202643e230071>

Abstract

Reconciling work and personal life during the pandemic was challenging, especially if the couple had young children. This study compared the perceptions of working mothers and fathers who had children from zero to six years of age regarding work-family balance and mental health during compulsory telework period in the pandemic period. Two hundred thirty-four professionals participated (158 mothers and 76 fathers). Data collection was performed online and included four duly validated scales: Current Perception of Professional Development Scale, Skills Scale for Telework at Home, Work Interference Scale with Family and Family Interference with Work Scale, and Scale of Depression, Anxiety, and Stress. The *t*-test analyses indicated unfavorable average scores for women, with an important effect size regarding depression, stress, work-family, and family-work conflict. Furthermore, men had a greater perception of professional development and skills for telework. We discuss the study's theoretical contributions and practical implications for combating gender inequalities in the work-family relationship.

Keywords: Gender perspective; Mental health; Pandemic; Teleworking; Work-life balance.

Resumo

Conciliar trabalho e vida pessoal na pandemia foi desafiador, especialmente com filhos pequenos. Este estudo comparou a percepção de trabalhadoras e trabalhadores com filhos até seis anos sobre conciliação trabalho-família e saúde mental durante o teletrabalho compulsório na pandemia. Participaram 234 profissionais (158 mães/76 pais). A coleta de dados on-line incluiu quatro escalas com evidências de validade: Escala de Percepção Atual de Desenvolvimento Profissional, Escala de Habilidades para o Teletrabalho em Casa, Escala de Interferência do Trabalho na Família

e de Interferência da Família no Trabalho e Escala de Depressão, Ansiedade e Estresse. As análises de testes t apontaram escores médios desfavoráveis às mulheres, com relevante tamanho de efeito, em termos de depressão, estresse, conflito trabalho-família e família-trabalho. Ademais, os homens apresentaram maior percepção de desenvolvimento profissional e habilidades para o teletrabalho. Discutimos contribuições teóricas do estudo e implicações práticas sobre o combate das desigualdades de gênero na relação trabalho-família.

Palavras-chave: Perspectiva de gênero; Saúde Mental; Pandemias; Teletrabalho; Equilíbrio trabalho-vida.

Work and family have long been considered as specific and unrelated dimensions in the lives of individuals, but the concept of work-family conflict comes precisely from the opposition between the roles required by these two dimensions (Aguiar & Bastos, 2013). This conflict can take two directions, being called work-family conflict when the professional sphere interferes with the family sphere and family-work conflict when family aspects affect the work sphere. During the COVID-19 pandemic, compulsory teleworking and the occurrence of remote learning have rekindled the debate on this type of conflict in both directions (Dorna, 2021; Lemos et al., 2020; Losekann & Mourão, 2020).

Teleworking had been growing before the pandemic, as 3.8 million people were already working remotely in Brazil (Abbad et al., 2021). This modality generated positive expectations for many professionals as a way to reconcile work and personal life and contribute to quality of life. Remote work was desired being synonym for autonomy, control of one's own time, self-management of work activities and improved family life (Filardi et al., 2020; Giacomello et al., 2022).

The Coronavirus Disease 2019 (COVID-19) pandemic brought the reality of compulsory teleworking to the forefront of the discussion. Many organizations were forced to implement remote work as a restrictive measure to protect their employees' health. This sudden implementation of teleworking system became a problem at global level, as most organizations had had no time to adequately prepare for this new reality (Giacomello et al., 2022; Kniffin et al., 2021).

Reports from professionals about the difficulties of reconciling work and home life began to emerge. Not being able to set the time dedicated to work hours and balancing these tasks with domestic responsibilities was a challenge experienced by many individuals (Kniffin et al., 2021; Losekann & Mourão, 2020). These challenges were greater for workers who had children of daycare or preschool age, since this age group is more dependent on care; furthermore school services had been temporarily suspended and teaching began to be carried out remotely. Parents had to assume full care of their children, including helping them in their home classes (Lemos et al., 2020).

In addition to having to work and teach remotely, social distancing measures also made it difficult for support networks – family and service providers – to take care of the home and children (Lemos et al., 2020). In this connection, the pandemic impacted people's routines and mental health. People lived with the fear of contagion, and the increase in the number of cases frightened a large part of the population. These factors had an impact on people's physical and psychological health. Brazil was already a country with many cases of mental health problems (Fundação Oswaldo Cruz, 2020) and the crisis generated by COVID-19 worsened this condition. A survey conducted by the Brazilian Institute of Research and Data Analysis (Instituto Brasileiro de Pesquisa e Análise de Dados, 2021) revealed that 70% of employees had their mental health affected by the pandemic. Among the survey's participants, 55% reported suffering from anxiety, 51% from stress, and 49% from sadness.

In the workplace, most organizations' digital platforms were available at any time of the day, and in order to reconcile household and care activities with work tasks, it was not uncommon

for people to disregard their physiological demands in terms of sleep routines, eating habits, etc. (Losekann & Mourão, 2020). There was also a disruption of the symbolic boundaries that separated the spaces of home and work, which also contributed to the generation of physical and mental health problems (Lemos et al., 2020).

In practice, many professionals suddenly transformed their homes into offices, requiring a series of adaptations and compromises never thought before. Home and work became one single space. Work conditions and structures were adapted within the family spaces; kitchens and bedrooms became improvised workstations, and video conferences occurred endlessly (Giacomello et al., 2022; Kniffin et al., 2021; Losekann & Mourão, 2020). Thus, balancing work and family in this context became even more challenging.

In this framework, issues related to persistent gender inequalities have taken on new dimensions. Historically, care for the home and children had been delegated more to women. According to data from the Instituto Brasileiro de Geografia e Estatística (2019), before the pandemic, 92.2% of women were engaged in household work, while this rate was 78.6% among men. In the pandemic context, domestic work has increased due to the precarious implementation of teleworking, with difficulties in reconciling it with domestic or family demands (Borges, 2022; Lemos et al., 2020).

This situation led 32.4% of men to increase their collaboration in domestic activities during the pandemic (Monticelli, 2021). However, women were more penalized by the growth of domestic demands during the health crisis, widening the already existing gender inequalities in connection with unpaid work (United Nations, 2021).

The presence of children or other dependents at home demands a lot of time in organizing household tasks, so that those in charge start their work earlier and finish later. According to a study by the International Labour Organization (2020), 22% of people living with children under 12 years old reported difficulty concentrating on their work most of the time, compared to 5% of those without children and 7% of those with children between 12 and 17 years old.

Studies have shown that teleworking can affect work-family balance, with gender differences, especially in the case of families with young children, as these require more attention (Lemos et al., 2020; Monticelli, 2021). Although much research has been carried out on work-family balance during the pandemic (Aguar et al., 2022; Borges, 2022; Castro & Chaguri, 2020; Collins et al., 2021; Dorna, 2021; Kniffin et al., 2021; Lemos et al., 2020; Losekann & Mourão, 2020), the literature did not focus on families who have children from zero to six years of age, as early childhood demands greater parental care and attention.

From a theoretical point of view, the delimitation of male and female workers who have children up to six years of age is justified because, the younger the child, the less autonomy he or she has and, therefore, the greater the demand for attention and care (Papalia, 2013). The Legal Framework for Early Childhood, Law 13,257, of 2016, considers this period as decisive for the emotional and cognitive development of the child, when there is a close relationship between care, demand for attention and learning.

In view of the above, the present study aimed to compare the perception of workers with children up to six years of age regarding work-family balance and mental health (symptoms of depression, anxiety and stress) in compulsory telework during the pandemic period. Additionally, perceptions of professional development and the acquisition of hard skills (skills more focused on technical or technological knowledge) and soft skills (behavioral skills, such as the ability to manage time or deal with conflict situations) were compared.

Considering the theory of gender stereotypes that attributes the female role of taking care of the home and children (Ellemers, 2018; Louro, 1994), as well as the research by Instituto Brasileiro de Geografia e Estatística (2019) and other studies on the subject (Barros & Mourão, 2018; Hirata & Kergoat, 2007), we formulated the following investigation hypotheses: Hypothesis 1: Mothers of children up to six years of age experienced more symptoms of depression during the pandemic teleworking period than fathers. Hypothesis 2: Mothers of children up to six years of age experienced more symptoms of stress during the pandemic's teleworking period than fathers. Hypothesis 3: Mothers of children up to six years of age experienced more symptoms of anxiety during the pandemic's teleworking period than fathers. Hypothesis 4: Mothers of children up to six years of age had a greater perception of work-family and family-work conflict during the pandemic teleworking period than fathers. Hypothesis 5: Mothers of children up to six years of age had a lower perception of professional development during the teleworking period of the pandemic than fathers and Hypothesis 6: Mothers of children up to six years of age had a lower perception of skills (soft skills and hard skills) for teleworking during the pandemic than fathers. In order to test these hypotheses, methodological strategies were defined, as described in the next section.

Method

Participants

The study sample was a convenience sample, comprising 234 participants who met the following inclusion criteria: i) age: 18 years or older; ii) agreement to participate in the investigation; iii) living with a partner and iv) having a child or stepchild between zero and six years of age; v) both members of the couple having worked in-person before the pandemic and teleworking during the pandemic period. The first two criteria met the ethical procedures defined for the investigation. The other requirements set forth for the participants, namely those living together and having children from zero to six years of age and both teleworking were associated with the study's objective.

We obtained a total of 234 valid responses, most of which from Rio de Janeiro (69.4%), São Paulo (7.7%) and Brasília (5.5%). Regarding gender, women had a higher participation rate (67.2%). The age of the participants ranged from 24 to 59 years, with an average of 38.3 years ($SD = 5.3$). Regarding the level of education, higher education predominated; a total of 47.7% respondents informed a *lato sensu* postgraduate degree and 17% a master's and/or doctorate degree. Only 5.5% of the sample consisted of high school education workers.

The length of employment varied from 1 to 41 years, with an average of 17 years ($SD = 6.3$); the average length of time in the current job was 9.6 years ($SD = 5.9$). All respondents had worked remotely at the beginning of the pandemic and, at the time of data collection, 44.3% continued to work fully from home and 28.9% were in a hybrid labor regime (telework and in-person work). Those employees who had fully returned to in-person work corresponded to just over a quarter of the sample. The predominant type of employment relationship was the CLT regime (in-person workers with official labor contracts) (47.7%), followed by self-employed professionals (23.4%) and public servants (22.1%), with a smaller number of entrepreneurs (11.1%), and 11 participants with two employment relationships.

Family income ranged from 1.15 to 41.3 minimum wages, with an average monthly gross family income of 12.5 minimum wages ($SD = 8.4$). Regarding marital status, 89.4% reported being married or cohabiting. Most had only one child (55.9%), although the number of couples with two

children was also significant (36.8%). Among the participants, 35% had children up to one year of age and 67% up to three years. Furthermore, 26.5% of the participants, indicated that they also had another child over six years of age beside the child in the age group zero to six years of age. Almost a quarter of the participants surveyed (23.4%) reported the birth of a child during the pandemic.

Before the pandemic, the family support network for childcare was predominantly provided by full-time (38.9%) or part-time daycare or school (36.6%). There were cases in which the couples themselves took care of the children (25.5%), in which case they got some support from family members (19.9%), or in which maids/nannies took on the children's daily care (18.1%). Among the participants, 27.4% had an arrangement that included more than one of these options. Most participants lived with their spouse (90.2%), with their children and stepchildren (88.9%), parents and in-laws (12%), maid or nanny (4.3%), and brother or brother-in-law (0.9%).

Table 1 summarizes the sample sociodemographic data. Tests were performed for the continuous variables, to assess whether there was a significant difference between male and female participants; the chi-square test was used for the categorical variables. The tests indicated a significant difference ($p < 0.01$) between male and female's working time $t(232) = 2.96$, as well as education ($\chi^2(3) = 12.6$), work regime ($\chi^2(2) = 16.4$), and the occurrence of childbirth during the pandemic ($\chi^2(1) = 7.2$).

Table 1

Description of the sample, with distribution between women and men

Sample characteristics	Women		Men		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Education*						
High School	3	1.9	10	13.2	13	5.6
Undergraduate	47	29.7	22	28.9	69	29.5
Postgraduate <i>lato sensu</i>	80	50.6	32	42.1	112	47.8
Master's/Doctorate	28	17.7	12	15.8	40	17.1
Marital status						
Single	8	5.1	3	3.9	11	4.7
Married/Common law marriage	142	89.9	68	89.5	210	89.7
Separated/Divorced	8	5.1	3	3.9	11	4.7
Widowed	0	0.0	2	2.6	2	0.9
Had children during the pandemic*						
Yes	29	18.4	26	34.2	55	23.5
No	129	81.6	50	65.8	179	76.5
Who took care of the children before the pandemic						
Full-time daycare/school	62	43.1	22	30.6	84	35.9
Part-time daycare/school	51	35.4	28	38.9	79	33.8
Couple looked after children	28	19.4	25	34.7	53	22.6
Maid/nanny	34	23.6	5	6.9	39	16.7
Family support	31	21.5	12	13.6	43	18.4
Number of children						
One child	93	58.9	38	50.0	131	56
Two children	60	38.0	26	34.2	86	36.8
Three or more children	5	3.2	12	15.8	17	7.3
Who did he live with?						
Spouse	138	87.3	73	96.1	211	90.2
Children/stepchildren	143	90.5	65	85.5	208	88.9
Parents/in-laws	16	10.1	12	15.8	28	11.9
Maid/nanny	10	6.3	0	0.0	10	4.3

Table 1*Description of the sample, with distribution between women and men*

2 of 2

Sample characteristics	Women		Men		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Work Regime*						
Full-time in-person	30	19	32	42.1	62	26.5
Full-time remote	82	51.9	22	28.95	104	44.4
Hybrid schedule	46	29.1	68	29.1	68	29.1
Children up to 1 year old	54	34.2	28	36.8	82	25.3
Children 2 years old	30	19.0	19	25.0	49	15.1
Children 3 years old	19	12.0	7	9.2	26	8.0
Children 4 years old	32	20.3	14	18.4	46	14.1
Children 5 years old	30	19.0	5	6.6	35	10.8
Children 6 years old	15	9.5	9	11.8	24	7.4
Children over 6 years old	38	24.1	24	31.6	62	19.1
Age – Mean (SD)	37.8	(4.6)	(39.3)	(7.4)	(38.3)	(5.2)
Income (R\$) – Mean (SD)	15.882	(10.173)	13.548	(10.133)	15.128	(10.197)
Working time** – Mean (SD)	16.1	(5.4)	18.9	(7.4)	17.0	(6.2)

Note: *Significant chi-square for differences between groups; **Significant *t*-test for differences between means. Research conducted online in different Brazilian cities in 2022.

Instruments

Four instruments duly validated for Brazilian samples were used, in addition to a sociodemographic questionnaire to characterize the sample. The first measure was the Skills Scale for Teleworking at Home (Abbad et al., 2021), with 10 items associated with a 5-point Likert-type scale, with 1 being “I completely disagree” and 5 “I completely agree”. The instrument has a two-factor empirical structure, assessing the skills for balancing work activities and household activities/family care (soft skills) and the skills for using digital resources in work interactions (hard skills). The internal consistency of the two factors in the original study was high ($\alpha = 0.90$ and $\alpha = 0.85$; and composite reliability of 0.90 and 0.82 for soft skills and hard skills respectively). Examples are: “I feel capable of managing my time, balancing remote work with household chores” (soft skills) and “I easily use communication resources in conversations with my manager and other members of my team” (hard skills).

The Work Interference with Family and Family Interference with Work Scale followed the version adapted for Brazil (Aguiar & Bastos, 2013), composed of two dimensions with five statements each, which assess the interference of work with the family and the family’s interference with work, with Cronbach’s Alpha above 0.90 in both dimensions. The responses ranged within a six-point Likert-type scale (1 = completely disagree and 6 = completely agree). Examples of items from the two dimensions are: “The demands of my work interfere with my family life” and “The demands of my family interfere with my work activities”.

The Depression, Anxiety and Stress Scale (DASS-21) (Martins et al., 2019), in turn, contains 21 items and three factors, with adequate reliability indices, measured by composite reliability (ranging from 0.89 to 0.95) and ordinal alpha (from 0.90 to 0.95). The response scale was a four-point Likert-type scale, ranging from 0 = Not applicable at all to 3 = Applies very much or most of the time. Examples of items on the scale are: “I felt discouraged and depressed” (Anxiety); “I couldn’t seem to have any positive feelings” (Depression); and “I had difficulty calming down” (Stress).

The Professional Development Short Scale (PDSS) (Mourão et al., 2022) has a one-dimensional structure and in its four items (reduced version) its Cronbach's Alpha was 0.82 and in the current study it was 0.90. Responses to this instrument were assigned using a Likert-type scale of agreement, ranging from 1 = I strongly disagree to 5 = I strongly agree. An example of an item: "I have experienced a significant professional development since I started working from home".

In addition to the instruments described above, two open-ended questions were included in the survey: the first was "What was the most difficult thing for you during the pandemic?" and the second was "How did you feel about having to deal with household responsibilities, childcare/stepchildren care, and work at the same time?" Both questions could be freely answered by the participants.

Procedures

The research project was previously registered on the *Plataforma Brasil* and approved by the Ethics Committee (CAEE: 52456021.9.0000.5282). Survey participants were contacted personally and through publication in the social media. Data collection was carried out individually and self-administered, with the forwarding of links to the online form, from October 2021 to June 2022. Participants were informed of the purpose of the investigation and their participation was conditioned on their agreement according to the Free and Informed Consent Form.

The analyses were performed using the Jamovi software (version 1.6.3, Sydney, Australia). Student's *t*-tests for independent samples were used to compare means in order to identify possible gender differences in scores on depression, anxiety and stress scales, work-family interference and family-work interference, as well as hard and soft skills associated with teleworking at home and perception of professional development during the teleworking period.

Levene's test had previously been performed to identify *t*-values in situations where homogeneity of variance may or may not be assumed. In cases where the *t*-tests were significant ($p < 0.05$), the effect size was also measured. Although Cohen's *d* is the most commonly used, we chose to use Hedges' *g* as the measurement, as it weights the calculation according to the relative size of each sample, which is important for the present study since the number of female participants was much larger than that of male participants. For this reason, the Hedges' *g* Calculator tool (available at <https://www.statology.org/hedges-g-calculator/>) was used. Effect sizes above 0.20 were considered noteworthy (Espírito Santo & Daniel, 2017).

To analyze the open-ended responses, all responses were first read and then followed by a stage of identification of the core meanings, which gave rise to a pre-categorization. After this stage, an analysis was performed by an external judge, and the responses were consensually grouped into specific final categories regarding both the main difficulties of the pandemic period and the feelings prevalent in the experiences of men and women working remotely during the health crisis. In identifying the core meanings, the same response could receive up to three classifications depending on the information provided by the participants.

Results

The investigation results showed that there were significant differences for almost all variables between the groups of fathers and mothers who had children up to six years old. Thus, it was possible to corroborate Hypothesis 1, since mothers of children up to six years old experienced

more symptoms of depression during the teleworking period of the pandemic than fathers ($t = 2.13$, $p = 0.03$), with an effect size (measured by Hedges' g) of around 0.30.

Likewise, it was also possible to corroborate Hypothesis 2, since mothers of children up to six years old experienced more symptoms of stress during the teleworking period of the pandemic than fathers ($t = 4.49$, $p < 0.01$, $g = 0.63$). On the other hand, hypothesis 3 was not corroborated, since no significant differences were found between mothers and fathers of children up to six years old in terms of anxiety during the teleworking period of the pandemic ($t = 1.58$, $p = 0.12$). Thus, women presented two variables related to mental health (stress and depression) with higher averages than men during the COVID-19 health crisis.

Hypothesis 4 was also supported, as mothers of children up to six years of age showed a greater perception of work-family conflict ($t = 4.14$, $p < 0.01$) and greater family-work conflict ($t = 3.38$, $p < 0.01$). The effect sizes of these differences between male and female scores were quite significant (Hedges' g of 0.58 and 0.47, respectively).

As expected, mothers of children up to six years old showed a lower perception of professional development than fathers ($t = -2.64$, $p < 0.01$, $g = 0.37$) during the teleworking period of the pandemic, which supported Hypothesis 5. Along the same lines, men also demonstrated that they had more soft skills aimed at remote work ($t = -5.40$, $p < 0.01$), as well as more developed hard skills for teleworking ($t = -3.40$, $p < 0.01$), which supported Hypothesis 6. The effect sizes for these variables, measured by Hedges' g , were 0.75 and 0.47 respectively. Table 2 presents the results of the hypothesis test, also indicating the effect size of each one.

Table 2

Student's t -tests for comparison of investigated variables, according to gender

Variables	Women ($n = 158$)	Men ($n = 76$)	t	df	Hedge's (g)
	M (SD)	M (SD)			
Anxiety	0.67 (0.68)	0.52 (0.66)	1.58	230	-
Depression	0.96 (0.75)	0.73 (0.80)	2.13*	230	0.30
Stress	1.51 (0.71)	1.00 (0.78)	4.49**	229	0.63
Professional Development	2.98 (1.01)	3.35 (0.93)	-2.64**	232	-0.37
Work vs. Family Conflict	3.63 (0.92)	3.08 (1.01)	4.14**	230	0.58
Family vs. Work Conflict	3.40 (1.02)	2.90 (1.08)	3.38**	230	0.47
Soft skills for teleworking	2.90 (0.81)	3.51 (0.80)	-5.40**	232	-0.75
Hard skills for teleworking	3.93 (0.76)	4.28 (0.68)	-3.40**	232	-0.48

Note: * $p < 0.05$; ** $p < 0.01$; df : degree of freedom. The scales relating to Anxiety, Depression and Stress ranged from 0 to 3 and the other scales ranged from 1 to 5. Research carried out online in different Brazilian cities in 2022.

In summary, women with children up to six years old had less favorable mental health conditions and perception of work-family and family-work conflict. On the other hand, fathers of children in this age group had a more positive perception of their professional development during the pandemic, and of their skills for teleworking, including family negotiations with managers regarding work-family balance.

The analysis of the answers to the open-ended questions complements the results obtained using the scales. Regarding the question "What was the most difficult issue for you during the pandemic?", we obtained a total of 253 responses, first classified into 28 preliminary categories, which after grouping by the judges with the adoption of the recurrence criterion and maintaining only categories that had a minimum of three indications yielded 15 response categories.

The issues most frequently reported by participants were: Work-family conflict (34.2%) and Isolation (24%), followed by “Demands from children” (16.8%) and “Having to deal with fear or death” (14.8%). Crossing these results with the participants’ gender indicates that the greatest pandemic issue for men was isolation (26.2%), while for women the predominant issue was work-family conflict (38.5%). Several other responses showed differences between men and women, as can be seen in Table 3.

Table 3
Difficulties encountered during the pandemic, according to gender

Difficulties during the pandemic	Women		Men		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Work-family conflict	52	38.5	15	24.6	67	34.2
Isolation	31	23.0	16	26.2	47	24.0
Demands from children	23	17.0	10	16.4	33	16.8
Dealing with fear or death	19	14.1	10	16.4	29	14.8
Mental health issues	10	7.4	2	3.3	12	6.1
Lack of support network	11	8.1	1	1.6	12	6.1
Financial instability/Unemployment	7	5.2	2	3.3	9	4.6
Lack of expectation for the end of the pandemic	6	4.4	3	4.9	9	4.6
Confinement	5	3.7	2	3.3	7	3.6
Difficulties in couple/family relationships	2	1.5	5	8.2	7	3.6
Establishing routines/organization	2	1.5	4	6.6	6	3.1
Work demands	5	3.7	0	0.0	5	2.6
Overload	3	2.2	1	1.6	4	2.0
No daycare/school	2	1.5	1	1.6	3	1.5
Lack of space at home	3	2.2	0	0.0	3	1.5

Note: Research carried out online in different Brazilian cities in 2022.

For the question “How did you feel having to deal with household responsibilities, childcare/stepchildren care and work at the same time?”, a total of 264 responses were obtained, grouped into 41 categories, which after the judges’ analysis, using the recurrence criterion and maintaining only categories that had a minimum of three indications, were funneled in 22 response categories. Based on this criterion, the responses Defeated/Failed, Apprehensive and Distressed were grouped into the category “Others”.

The most frequent feelings reported by the respondents were: Overwhelmed (24.8%), Tired (16.5%), Exhausted (15.5%), Calm/Normal/Good/Comfortable (14.1%). The significant difference in feelings reported by men and women is striking. While the predominant feeling among men was Calm/Normal/Good/Comfortable (30.2%), among women it was a predominant feeling of overload (30.8%). Conversely, only 11.1% of men mentioned being overwhelmed and 7% of women responded indicating the feelings Calm/Normal/Good/Comfortable. Table 4 reports the male and female responses regarding feelings when dealing with household responsibilities, childcare and work simultaneously.

The joint analysis of the results obtained in the scales and in the answers to the open-ended questions confirms an inequality in the experiences of mothers and fathers of children up to six years of age during the pandemic. In the next section we shall discuss such results taking into account the literature on the subject.

Table 4*Feelings about work-family balance during the pandemic, according to gender*

Feelings during the pandemic	Women		Men		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Overwhelmed	44	30.8	7	11.1	51	24.8
Tired	29	20.3	5	7.9	34	16.5
Exhausted	31	21.7	1	1.6	32	15.5
Calm/Normal/Fine/Comfortable	10	7.0	19	30.2	29	14.1
Unable/Inefficient	11	7.7	5	7.9	16	7.8
Nervous/Angry/Impatient/Tense	9	6.3	6	9.5	15	7.3
Stressed	13	9.1	2	3.2	15	7.3
Disheartened/Unmotivated/Bored	6	4.2	2	3.2	8	3.9
Confused/Stunned/Lost	5	3.5	2	3.2	7	3.4
Supported	4	2.8	2	3.2	6	2.9
Pressured	3	2.1	2	3.2	5	2.4
Anxious	3	2.1	2	3.2	5	2.4
Adjusted	1	0.7	4	6.3	5	2.4
Happy/Privileged	2	1.4	2	3.2	4	1.9
Crazy	3	2.1	1	1.6	4	1.9
Desperate	3	2.1	1	1.6	4	1.9
Struggling	2	1.4	2	3.2	4	1.9
Vulnerable/Sensitive	3	2.1	1	1.6	4	1.9
Frustrated	3	2.1	0	0.0	3	1.5
Sad	3	2.1	0	0.0	3	1.5
Challenged	1	0.7	2	3.2	3	1.5
Other	5	1.4	2	1.6	7	3.4

Note: Research carried out online in different Brazilian cities in 2022.

Discussion

This study aimed to compare men and women who had young children and who adhered to telework during the COVID-19 pandemic in relation to the variables depression, anxiety and stress, interference of work on the family and of the family on work, as well as hard and soft skills associated with telework at home and the perception of professional development during the period of telework. The results allowed us to identify that, with the exception of anxiety, which showed no significant differences between men and women, mothers with young children yielded more negative outcome in all other variables investigated.

Mothers who teleworked, showed higher levels of mental health impairment – with a higher incidence of stress and depression – compared to fathers who worked in the same labor modality. In the original study of the DASS-21 Scale (Martins et al., 2019), which included a sample of 1,042 university students, no significant difference according to gender was found regarding the prevalence of emotional states (depression, stress, and anxiety). Such results differ from the preliminary assessment found for the same measure, indicating that the context in which the mothers and fathers surveyed found themselves may explain the significant differences in the perception of symptoms of depression and stress. However, for anxiety, there was no difference between male and female scores, confirming the findings of Martins et al. (2019). Regarding the pandemic period, the results of the present study coincide with other reports in the literature, which already indicated an increase in the prevalence of mental health issues during the health crisis, with indicators being more unfavorable to women (Faro et al., 2020; Giacomello et al., 2022).

The work-family and family-work conflict was more present in mothers, with significant differences in relation to fathers and an effect size above the parameters established by Espírito

Santo and Daniel (2017). The triangulation of the scales outcome with the analysis of the responses to the open questions about the greatest difficulties faced during the pandemic indicated that those conflicts (work-family and family-work) are mainly due to the increased demand for childcare and household activities. In the spontaneous responses, mothers revealed a higher incidence in the category "Work-family conflict", while fathers revealed a predominant frequency in the category "Isolation". While mothers stated that the predominant feeling during the pandemic period was "Overload", the category "Calm/Normal/Fine" prevailed among fathers, which corroborates the findings that mothers were more affected during that health period.

The perception of a more intense work-family and family-work conflict by women corroborates previous studies such as those by Castro and Chaguri (2020) and Lemos et al. (2020), which indicated that women perceive that they are interrupted more than men when they are teleworking, both by family members and by bosses and colleagues. Gender stereotypes lead children to demand more from their mothers than from their fathers when both are working from home, which contributes to female overload (Borges, 2022; Lemos et al., 2020) and to higher levels of stress among women (Castro & Chaguri, 2020; Collins et al., 2021; Dorna, 2021; Giacomello et al., 2022; Lemos et al., 2020; Shockley et al., 2021).

Thus, our study confirms the findings reported in the literature that women take on a greater workload with household and childcare activities, even when men are also working from home, as occurred during the pandemic isolation period. The interference caused by family and work brought challenges to time management and dedication to both household and professional activities, so that women experienced more mental health symptoms than men. The female experience of more depression and stress symptoms confirms studies carried out at the peak of the pandemic which found a higher level of moderate or severe psychological disorders incidence in women, such as depression, anxiety and stress (Faro et al., 2020).

In contrast, men perceived greater professional development during the pandemic, noticing better opportunities for qualification. They also evaluated their skills for teleworking (hard and soft skills) more positively, since they were able to better deal with remote work technologies and also reconcile work activities with family demands, better managing their time and professional performance. This result is possibly associated with the fact that men's workspaces, even at home, were more preserved, as shown by the spontaneous responses of the mothers and fathers participating in this survey. The literature indicates that men, in general, are less involved in household and care tasks (Aguiar et al., 2022; Barros & Mourão, 2018). Possibly because of this, young children learn to demand more from their mothers, enhancing a gender stereotype that is very present in our society.

These results, on the one hand, corroborate other findings in the literature that already indicated a greater female overload with unpaid work with negative repercussions for their work performance (Barros & Mourão, 2018; Hirata & Kergoat, 2007; Instituto Brasileiro de Geografia e Estatística, 2019). On the other hand, no study with mothers and fathers of early childhood children was found in the national literature, which helps giving our research an innovative character. There is a consensus that early childhood is the most demanding period for children in relation to parental care (Castro & Chaguri, 2020; Dorna, 2021; Papalia, 2013; Zhang et al., 2020).

Thus, our investigation pointed out a difference in favor of male workers with regard to labor variables while confirming a greater burden of the unpaid work in the daily lives of women who are mothers of young children (Castro & Chaguri, 2020). Many fathers, even when working from home and having more possibilities to share household and childcare tasks, do not assume these

responsibilities to the same extent as women (Collins et al., 2021). Thus, with the pandemic, the female work overload, which was already greater, became more evident, due to the gender sharing of labor, multiple shifts and taking on household chores, and the difficulties in reconciling work and family life, which may have contributed to the greater perception of their mental health problems.

Conclusion

Our conclusion is that, although no significant difference was found between the level of anxiety of fathers and mothers who had children up to six years old, women were significantly more affected than men in terms of depression, stress, work-family conflict and family-work conflict. On the other hand, men exhibited more positive indicators for the perception of professional development and teleworking skills during the pandemic period.

Despite helping to shed light on the maintenance and intensification of gender inequalities regarding unpaid work, this study has limitations. One of them concerns the size of the sample, especially of men. Although the outreach to this specific audience was intensified, the rallying response of men was much weaker than that of women. In this connection, future studies ought to establish differentiated data collection strategies for men.

Another limitation of the study was the focus on individuals with higher education, which was not the objective of the initial research program, but which occurred because this target audience corresponded to the largest contingent of teleworkers during the pandemic. However, it would be important in future studies to include workers with secondary or elementary education, since the arrangements for carrying out household and childcare activities can be very different for them.

Despite these limitations, this study seeks to contribute to the knowledge of both researchers in this field and professionals working in the area of people management. Theoretically, the study's findings reveal that, despite the advances in recent decades to reduce gender inequalities, gender stereotypes are still present, clearly harming women's mental health and professional development. In this connection, it would be important for the organizations to develop strategies that favor greater equity in the relationships between family and labor. It is also important to reassess public policies aimed at this topic, seeking to build a society that is in fact more egalitarian with regard to gender.

For future studies, we ought to consider other variables such as race/ethnicity, and social class including sexual orientation, since the social difference markers go far beyond a male and female dyad. It is also important that new research monitor unpaid labor in teleworking conditions that are not associated with a pandemic crisis, especially considering that hybrid work has revealed to be a strong trend. Finally, research with couples in which only one member is teleworking could be informative to further the discussion of gender stereotypes and the roles socially assigned to men and women today.

References

- Abbad, G.S., Mourão, L., Costa, R.B., Martins, L.B., Legentil, J., & Miranda, L. (2021). Habilidades para teletrabalho em casa: construção e evidências de validade da escala. *Revista Psicologia Organizações e Trabalho*, 21(3), 1655-1664. <https://dx.doi.org/10.5935/rpot/2021.3.22568>
- Aguiar, C. V. N., & Bastos, A. V. B. (2013). Tradução, adaptação e evidências de validade para a medida de Conflito trabalho-família. *Avaliação Psicológica*, 12(2), 203-212. <https://bit.ly/425613V>
- Aguiar, S. F. B., Oliveira, F. B., Hryniewicz, L. G. C., & Sant'Anna, A. S. (2022). O teletrabalho e as mulheres: percepções da conciliação da vida profissional e familiar. *Cadernos EBAPE.BR*, 20(6). <http://dx.doi.org/10.1590/1679-395120210244>

- Barros, S. C. V., & Mourão, L. (2018). Panorama da participação feminina na educação superior, no mercado de trabalho e na sociedade. *Psicologia & Sociedade*, 30, e174090. <https://doi.org/10.1590/1807-0310/2018v30174090>
- Borges, A. C. S. (2022). Trabalho home office e os reflexos na vida pessoal e profissional das mulheres durante a pandemia de COVID-19. *Revista Gesto: Revista de Gestão Estratégica de Organizações*, 10(2), 61-74. <https://doi.org/10.31512/gesto.v10i2.637>
- Castro, B., & Chaguri, M. M. (2020). Gênero, tempos de trabalho e pandemia: por uma política científica feminista. *Linha Mestra*, 41a, 23-31. <https://doi.org/10.34112/1980-9026a2020n41ap23-31>
- Collins, C., Landivar, L. C., Ruppanner, L., & Scarborough, W. J. (2021). COVID-19 and the gender gap in work hours. *Gender, Work & Organization*, 28(S1), 101-112. <https://doi.org/10.1111/gwao.12506>
- Dorna, L. B. H. (2021). O trabalho doméstico não remunerado de mães na pandemia da COVID-19: mudanças e permanências. *Laboreal*, 17(1), e17860. <https://doi.org/10.4000/laboreal.17860>
- Ellemers, N. (2018). Gender Stereotypes. *Annual Review of Psychology*, 69(1), 275-298. <https://doi.org/10.1146/annurev-psych-122216-011719>
- Espírito Santo, H., & Daniel, F. (2017). Calcular e apresentar tamanhos do efeito em trabalhos científicos (1): as limitações do $P < 0,05$ na análise de diferenças de médias de dois grupos. *Revista Portuguesa de Investigação Comportamental e Social*, 1(1), 3-16. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2999091
- Faro, A., Bahiano, M. A., Nakano, T. C., Reis, C., Silva, B. F. P., & Vitti, L. S. (2020). COVID-19 e saúde mental: a emergência do cuidado. *Estudos de Psicologia* (Campinas), 37, e200074. <https://doi.org/10.1590/1982-0275202037e200074>
- Filardi, F., Castro, R. M. P. D., & Zanini, M. T. F. (2020). Vantagens e desvantagens do teletrabalho na administração pública: análise das experiências do Serpro e da Receita Federal. *Cadernos EBAPE.BR*, 18(1), 28-46. <https://doi.org/10.1590/1679-395174605>
- Fundação Oswaldo Cruz. (2020). COVID-19: ansiedade afeta 47,3% dos trabalhadores essenciais. Agência Fiocruz de Notícias. <https://bit.ly/3r9RHYK>
- Giacomello, L. B. A., Giongo, C. R., Ribeiro, B. C., & Perez, K. V. (2022). Teletrabalho na pandemia de COVID-19: impactos na saúde mental de trabalhadores. *Trabalho (En)Cena*, 7, e022029. <https://doi.org/10.20873/2526-1487e022029>
- Hirata, H., & Kergoat, D. (2007). Novas configurações da divisão sexual do trabalho. *Cadernos de Pesquisa*, 37(132), 595-609. <https://doi.org/10.1590/S0100-15742007000300005>
- Instituto Brasileiro de Pesquisa e Análise de Dados. (2021). Pesquisa revela que 70% dos empregados tiveram sua saúde mental afetada pela pandemia. IBPAD. <https://bit.ly/3rbETkA>
- Instituto Brasileiro de Geografia e Estatística. (2019). PNAD Contínua 2017: realização de afazeres domésticos e cuidados de pessoas cresce entre os homens, mas mulheres ainda dedicam quase o dobro do tempo. IBGE. <https://bit.ly/3LAh0lk>
- Kniffin, K. M., Narayanan, J., Anseel, F., Antonakis, J., Ashford, S. P., Bakker, A. B., Bamberger, P., Bapuji, H., Bhawe, D. P., Choi, V. K., Creary, S. J., Demerouti, E., Flynn, F. J., Gelfand, M. J., Greer, L. L., Johns, G., Keesebir, S., Klein, P. G., Lee, S. Y., ... Vugt, M. van. (2021). COVID-19 and the workplace: Implications, issues, and insights for future research and action. *American Psychologist*, 76(1), 63-77. <https://doi.org/10.1037/amp0000716>
- Lemos, A. H. D. C., Barbosa, A. D. O., & Monzato, P. P. (2020). Mulheres em Home Office Durante a Pandemia da COVID-19 e as Configurações do Conflito Trabalho-Família. *Revista de Administração de Empresas*, 60(6), 388-399. <https://doi.org/10.1590/s0034-759020200603>
- Losekann, G. C. B. R., & Mourão, H. C. (2020). Desafios do teletrabalho na pandemia COVID-19: quando o home vira office. *Caderno de Administração*, 28, 71-75. <https://doi.org/10.4025/cadadm.v28i0.53637>
- Louro, G. L. (1994). Uma leitura da história da educação sob a perspectiva de gênero. *Projeto História*, 11(1), 31-46. <https://revistas.pucsp.br/index.php/revph/article/view/11412>

- Martins, B. G., Silva, W. R., Maroco, J., & Campos, J. A. D. B. (2019). Escala de Depressão, Ansiedade e Estresse: propriedades psicométricas e prevalência das afetividades. *Jornal Brasileiro de Psiquiatria*, 68(1), 32-41. <https://doi.org/10.1590/0047-2085000000222>
- Monticelli, T. (2021). Divisão sexual do trabalho, classe e pandemia: novas percepções? *Sociedade e Estado*, 36(1), 83-107. <https://doi.org/10.1590/s0102-6992-202136010005>
- Mourão, L., Tavares, S. M., & Sandall, H. (2022). Professional development short scale: measurement invariance, stability, and validity in Brazil and Angola. *Frontiers in Psychology*, 13, e841768. <https://doi.org/10.3389/fpsyg.2022.841768>
- Organização Internacional do Trabalho. (2020). *Teletrabalho durante e após a pandemia da COVID-19: guia prático*. Bureau Internacional do Trabalho. <https://bit.ly/447r8Cc>
- United Nations. (2021). *Whose time to care? Unpaid care and domestic work during COVID-19*. UN Women. <https://bit.ly/3D2fpIU>
- Shockley, K. M., Clark, M. A., Dodd, H., & King, E. B. (2021). Work-family strategies during Q'-19: examining gender dynamics among dual-earner couples with young children. *Journal of Applied Psychology*, 106(1), 15-28. <https://doi.org/10.1037/apl0000857>
- Papalia, D. E (2013). *Desenvolvimento humano*. Artmed.
- Zhang, S., Moeckel, R., Moreno, A. T., Shuai, B., & Gao, J. (2020). A work-life conflict perspective on telework. *Transportation Research Part A: Policy and Practice*, 141, 51-68. <https://doi.org/10.1016/j.tra.2020.09.007>

Contributors

Conceptualization, Formal analysis, Methodology and Validation: J. ALEDI and L. MOURÃO.
Investigation: J. ALEDI. Data curation: J. ALEDI. Supervision: L. MOURÃO. Writing – original draft: J. ALEDI.
Writing – review and editing: J. ALEDI and L. MOURÃO.