

## Interactions between Parents and Children: The Impact of the COVID-19 Pandemic

### Interações entre Pais e Filhos: O Impacto da Pandemia por Covid-19

### Interacciones entre Padres e Hijos: El Impacto de la Pandemia de COVID-19

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#### Abstract

This cross-sectional study aimed to assess the impact of the pandemic on parent-child interactions. Parents of 466 children between 3 and 10 years of age answered a questionnaire via WhatsApp and social media platforms, addressing the frequency of allowing the use of electronic devices, providing help with schoolwork, and whether children witnessed conflicts between their parents and between other adults. Independent variables included: age, gender, and education of both parents and children; family income; the number of income contributors that reside in the household; responsibility for domestic activities and if these chores affected their routine. Factors associated with changes in parent-child interactions were examined using multinomial regression models. An unadjusted analysis of the independent variables was carried out, with those having a p-value <0.20 included in the adjusted model. Odds ratios (OR) and 95% confidence intervals were obtained. Following the onset of the pandemic, parents provided more assistance with schoolwork (343 – 73.6%) and allowed electronic devices more frequently (358 – 76.8%), but the recurrence of arguing with one another (256 – 54.9%) remained unchanged. Significant changes in parent-child interactions occurred due to the pandemic.

**Keywords:** child development, electronic devices, parental care, education, COVID-19

#### Resumo

Este estudo transversal buscou avaliar o impacto da pandemia nas interações entre pais e filhos. Pais de 466 crianças com idade entre 3 e 10 anos responderam a um questionário por WhatsApp e redes sociais sobre: frequência com que permitiam o uso de dispositivos eletrônicos, ajudavam nas tarefas escolares e que as crianças testemunhavam discussões entre adultos. Variáveis independentes: idade, sexo e educação dos pais e das crianças; renda familiar; número de contribuintes para a renda e que vivem no domicílio, se era responsável pelas atividades domésticas e se essas afetaram sua rotina. Fatores associados às mudanças nas interações entre pais e filhos foram verificados por modelos de regressão multinomial. Foi realizada análise não ajustada das variáveis independentes, aquelas com valor de  $p < 0,20$  foram incluídas no modelo ajustado. Foram obtidas as razões de chances (RC) e intervalos de confiança de 95%. Após o início da pandemia, os pais auxiliaram mais seus filhos nas tarefas escolares (343 – 73,6%) e permitiram dispositivos eletrônicos com maior frequência (358 – 76,8%), mas a presença nas discussões (256 – 54,9%) não se alterou. Mudanças significativas nas interações entre pais e filhos ocorreram devido à pandemia.

**Palavras-chave:** desenvolvimento infantil, dispositivos eletrônicos, cuidados parentais, educação, covid-19

#### Resumen

Este estudio transversal buscó evaluar el impacto de la pandemia en las interacciones entre padres e hijos. Padres de 466 niños de 3 a 10 años respondieron a un cuestionario a través de WhatsApp y redes sociales sobre: la frecuencia con la que permitían el uso de dispositivos electrónicos, ayudaban con las tareas escolares y si los niños presenciaban discusiones entre ellos y otros adultos. Variables independientes: edad, sexo y educación de los padres y de los niños; ingreso familiar; número de contribuyentes al ingreso

que viven en el hogar, si eran responsables de las actividades domésticas y si estas afectaban su rutina. Se verificaron los factores asociados a los cambios en las interacciones entre padres e hijos mediante modelos de regresión multinomial. Se realizó un análisis no ajustado de las variables independientes, aquellas con un valor de  $p < 0,20$  se incluyeron en el modelo ajustado. Se obtuvieron las razones de posibilidades (RP) e intervalos de confianza del 95%. Después del inicio de la pandemia, los padres ayudaron más a sus hijos con las tareas escolares (343 – 73,6%) y permitieron dispositivos electrónicos con mayor frecuencia (358 – 76,8%), pero la presencia en discusiones (256 – 54,9%) no cambió. Cambios significativos en las interacciones entre padres e hijos ocurrieron debido a la pandemia.

*Palabras clave:* desarrollo infantil, dispositivos electrónicos, cuidado parental, educación, COVID-19

## Introduction

The spread of COVID-19 in 2020 forced the entire world to adapt to a new pandemic reality. Among the implemented measures, social distancing profoundly impacted people's way of life, as it was experienced in other historical moments, such as the Black Death and the Spanish flu, with uncertain consequences (Ahmed et al., 2020).

The pandemic poses a risk to the well-being of children and families due to financial insecurity, excessive caregiving, and stress resulting from isolation (Prime et al., 2020). In the first month following the pandemic's onset, a survey of 4,600 Canadians revealed concerns about family stress and anxiety, socioeconomic changes, and the possibility of experiencing domestic violence; one-third of families self-reported feeling very or extremely anxious due to social isolation (Statistics Canada, 2020). In Brazil, a 2020 study with 897 residents of Juiz de Fora indicated significant behavioral and mood changes in nearly the entire sample (91%). The most commonly mentioned changes included: restlessness (65.7%), fear of losing loved ones (56.9%), irritability (49.1%), apprehension about the future (46.6%), melancholy (44.1%), fear of being infected by the virus (42.4%), feelings of isolation (26.3%), and fear of death (21.5%). Approximately half of the participants (48%) noticed more than four distinct mood changes during this period (Reis et al., 2022). Even before the pandemic, parental mental health was generally associated with children's psychological well-being (Connell & Goodman, 2002; Sprang, & Silman, 2013). A healthy parent-child relationship is essential for fostering or promoting child development, providing a sense of security (Li et al., 2014; Tamir, & Regev, 2021), and eventually, social, academic, and professional success (Gavron, 2013; Li et al., 2020). With the arrival of the pandemic and the closure of schools, some parents may have been required to juggle work responsibilities, household chores, and take on the role of teachers (Wang et al., 2020; Giordano et al., 2023). We wonder to what extent this indeed occurred, increasing the interaction between parents and children during involvement in school tasks (Giordano et al., 2023; Wang et al., 2020). In this context, it is crucial to gather information about the transformations in parent-child interactions following the onset of the COVID-19 pandemic. This study aimed to identify whether there were changes in parent-child interactions concerning school tasks, the use of electronic devices, and intra-family discussions with the onset of the COVID-19 pandemic, given the limited research in Brazil in this particular domain.

## Methodology

This cross-sectional study was submitted to the Research Ethics Committee of the Faculty of Health Sciences (CEP/FS) at the University of Brasília (UnB) and approved under number

4,535,075. A pilot study was conducted with 30 parent (or guardian) participants from UnB/UFSC and a previous study involving children aged 3 to 10 years. Pilot study participants were not included in the final study. All the question evaluated with three, four or five were maintained and those with one or two were discarded. Since all the presented questions in the pilot study received three to five in the Likert scale, they were maintained in their original format. Factorial analysis to determine psychometric properties and the number of the questionnaire dimensions were not performed. This was because of the timing to apply the questionnaire once Brazil was in the worst wave of the pandemic with thousands of people dying. The questionnaire was applied between 3/4/2021 and 4/7/2021. Yet, at the time many schools were with on line classes. Links to the survey were sent via WhatsApp and social media platforms to parents, who could respond by clicking the link and accessing the questionnaire. The form began with participant data (age, gender, and children's age), followed by COVID-19-related questions. Parents eligible participants were parents of children aged 3-10 years, excluding those under 18 years. Data were collected through an online form, created and managed using Google Forms on Google Drive, and arranged in Microsoft Excel. The questionnaire was adapted from relevant articles, translated into Brazilian Portuguese for participant understanding (Waller et al., 2020). Items were adjusted to fit the research subject, with additional questions created for the Brazilian context. The outcome variable was the change in parent-child interactions due to COVID-19, assessed using specific questions. Response options were grouped into three categories for statistical analysis: less, the same, and more, than before pandemic. Independent variables included child and parent demographics, household income, and household responsibilities. Variable selection was based on their potential influence on the outcomes, as shown in related literature. Even before the pandemic, variables such as household income, parental education, and gender were shown to affect access to and frequency of electronic device use, for example. For sample size calculation, an 85.8% proportion of parents with mood changes or stress was considered (Brown et al., 2020), with a 95% confidence level and a 5% margin of error. A 20% adjustment compensated for non-response or non-adherence, resulting in a minimum sample of 235 participants.

Sample size calculation by region used a rule of three, considering population distribution by state from the latest census and a minimum sample of 235 participants. The numbers relative to the minimum sample for representativeness were as follows: North Region- 20; Northeast- 66; Southeast- 99; South- 34; Central-West- 18. Representative samples were reached in the South (264) and Central-West (128) regions; however, they were not representative in the North (5), Northeast (17), and Southeast (58) regions. Data analysis used SPSS (version 24.0), with an initial descriptive analysis of the main sample characteristics. Numeric data were presented as mean and standard deviation, and categorical variables as frequencies. To investigate factors associated with changes in parent-child interactions, multinomial regression models were conducted. First, an unadjusted analysis of independent variables was performed, with variables having a p-value < 0.20 included in the adjusted model. The "same" category served as the reference category, and odds ratios (OR) and 95% confidence intervals were obtained, using a 5% significance level.

## Results

This study analyzed data from 466 children and their parents. The children were predominantly male (50.2%), aged between 3 and 10 years (mean  $5.4 \pm 2.1$  years). The majority (86.9%) attended private schools. Parents were 88% female ( $n=410$ ) and 12% male ( $n=56$ ), aged between 19 and 62 years (mean  $39.2 \pm 5.1$  years). Most respondents held a higher education degree (95.9%) and had a household income greater than 2 minimum wages (93.6%). Respondents reported that after the COVID-19 pandemic began, they provided more assistance to their children with schoolwork ( $n=343$ , 73.6%) and allowed their children to make greater use of electronic devices for entertainment ( $n=358$ , 76.8%). With respect to episodes of conflict, most respondents reported that children continued to witness the same amount of arguing during the pandemic ( $n=256$ , 54.9%). Table 1 presents the descriptive analysis of the main sample characteristics ( $n=466$ ).

**Table 1**

*Descriptive Analysis of the Main Characteristics of the Studied Sample*

Variables	N (%)	Mean $\pm$ SD
<b>Child's Gender</b>		
Male	234 (50,2)	
Female	232 (49,8)	
<b>Child's Age</b>		5,41 $\pm$ 2,11
<b>Child's School Network</b>		
Public	50 (10,7)	
Private	405 (86,9)	
Not attending school	11 (2,4)	
<b>Guardian's Gender</b>		
Male	56 (12,0)	
Female	410 (88,0)	
<b>Guardian's Age</b>		39,22 $\pm$ 5,16
<b>Number of Residents</b>		3,66 $\pm$ 0,75
<b>Number of Contributors</b>		1,88 $\pm$ 0,48
<b>Guardian's Education</b>		
Up to High School Completed	19 (4,1)	
Higher Education	447 (95,9)	
<b>Household Income</b>		
$\leq$ 2 minimum wages	30 (6,4)	
$>$ 2 minimum wages	436 (93,6)	
<b>Responsible for domestic activities</b>		
No	59 (12,6)	
Partially	286 (61,4)	
Fully	121 (26,0)	
<b>Influence of domestic activities on routine</b>		
No	30 (6,4)	
Little	176 (37,8)	
A lot	260 (55,8)	
<b>Allowed child to use electronic devices</b>		
Same	95 (20,4)	

Variables	N (%)	Mean $\pm$ SD
Less	13 (2,8)	
More	358 (76,8)	
<b>Child witnessed conflicts</b>		
Same	256 (54,9)	
Less	113 (24,2)	
More	97 (20,8)	
<b>Helped child with schoolwork</b>		
Same	101 (21,7)	
Less	22 (4,7)	
More	343 (73,6)	

Table 2 presents the multinomial regression for factors associated with changes in children's use of electronic devices for entertainment during the pandemic. Children attending private schools had a 2.24 times higher chance of their parents allowing increased use of devices for entertainment [OR: 2.24 (95% CI: 1.04 – 4.82; P=0.03)]. The other independent variables were not associated with the outcome. Table 3 shows the multinomial regression model of factors associated with changes in children witnessing conflicts between adults during the pandemic. Respondents with higher education reported a higher chance of change regarding conflicts, for both more [OR: 9.78 (95% CI:1.35 – 70.89; P=0.02)] and less [OR: 5.27 (95% CI:1.15 – 24.14; P=0.03)]. Additionally, respondents who reported that domestic activities somewhat [OR: 8.67 (95% CI:1.07 – 69.92; P=0.04)] and greatly [OR: 10.27 (95% CI: 1.25 – 84.13; P=0.03)] influenced their routines had a higher chance of children witnessing more conflicts between adults during the pandemic. Finally, Table 4 presents the results regarding factors associated with changes in adult assistance with children's schoolwork during the pandemic. Girls had a 69% higher chance of receiving more help from parents with schoolwork during the pandemic [OR:1.69 (95% CI:1.04 – 2.74; P=0.03)]. With each additional year of the child, the chance of receiving more help with schoolwork increased by 23% [OR: 1.23 (95% CI: 1.08 – 1.39; P<0.01)]. Children not attending schools had a lower chance of receiving more help with schoolwork [OR:0.06 (95% CI: 0.01 – 0.60; P=0.02)]. With each additional household resident, the chance of the child receiving more help with schoolwork increased by 47% [OR:1.47 (95% CI:1.06 – 2.04; P=0.02)]. Similarly, when respondents reported being fully responsible for domestic chores, the chance of children receiving more help with schoolwork was 2.37 times higher [OR:2.37 (95% CI:1.01 – 5.56; P=0.04)].

**Table 2**

*Final Multinomial Regression Model to Assess Possible Factors Associated with the Change in the use of Electronic Devices for Entertainment during the Pandemic (N=466)*

	Adjusted Analysis (Less x Equal) CR (95%CI)	P	Adjusted Analysis (More x Equal) CR (95%CI)	P
<b>Independent variables</b>				
<b>Child's Gender</b>	-		-	
Male				
Female				

	Adjusted Analysis (Less x Equal) CR (95%CI)	P	Adjusted Analysis (More x Equal) CR (95%CI)	P
<b>Child's Age</b>	0,75 (0,49 – 1,15)	0,19	1,07 (0,95 – 1,21)	0,24
<b>Child's School Network</b>		0,99		
Public	1		1	
Private	0,99 (0,17 – 5,77)		2,24 (1,04 – 4,82)	<b>0,03</b>
Not attending school	-		6,93 (0,77 – 62,60)	0,08
<b>Guardian's Gender</b>	-			
Male				
Female				
<b>Guardian's Age</b>	0,91 (0,80 – 1,04)	0,19	1,01 (0,96 – 1,05)	0,85
<b>Number of Residents</b>	1,57 (0,70 – 3,51)	0,27	1,33 (0,97 – 1,84)	0,08
<b>Number of Contributors</b>	0,46 (0,14 – 1,52)	0,20	1,30 (0,78 – 2,17)	0,31
<b>Guardian's Education</b>		0,28		0,38
Up to High School Completed	1		1	
Higher Education	0,28 (0,03 – 2,83)		0,55 (0,14 – 2,11)	
<b>Household Income</b>		0,09		0,42
≤ 2 minimum wages	1		1	
> 2 minimum wages	5,11 (0,77 – 33,60)		0,63 (0,20 – 1,97)	
<b>Responsible for domestic activities</b>	-		-	
No				
Partially				
Fully				
<b>Influence of domestic activities on routine</b>	-		-	
No				
Little				
A lot				

Table 3

*Final Multinomial Regression Model to Assess Possible Factors Associated with Change regarding Children Having Witnessed Discussions among Adults during the Pandemic (N=466)*

	Adjusted Analysis (Less x Equal) CR (95%CI)	P	Adjusted Analysis (More x Equal) CR (95%CI)	P
<b>Independent variables</b>				
<b>Child's Gender</b>	1	0,52	1	0,09
Male	1,16 (0,73 – 1,85)		1,52 (0,93 – 2,47)	
Female				
<b>Child's Age</b>	0,99 (0,87 – 1,10)	0,83	0,91 (0,80 – 1,02)	0,10
<b>Child's School Network</b>				
Public	1		1	
Private	0,73 (0,34 – 1,57)	0,42	2,59 (0,82 – 8,18)	0,10
Not attending school	0,28 (0,03 – 2,66)	0,27	2,08 (0,35 – 12,44)	0,41
<b>Guardian's Gender</b>	-		-	
Male				
Female				

	Adjusted Analysis (Less x Equal) CR (95%CI)	P	Adjusted Analysis (More x Equal) CR (95%CI)	P
<b>Guardian's Age</b>	-		-	
<b>Number of Residents</b>	1,25 (0,92 – 1,69)	0,15	1,09 (0,79 – 1,50)	0,61
<b>Number of Contributors</b>	-		-	
<b>Guardian's Education</b>		<b>0,03</b>		<b>0,02</b>
Up to High School Completed	1		1	
Higher Education	5,27 (1,15 – 24,14)		9,78 (1,35 – 70,89)	
<b>Household Income</b>		0,72	1	0,30
≤ 2 minimum wages	1		0,41 (0,08 – 2,16)	
> 2 minimum wages	0,81 (0,73 – 1,84)			
<b>Responsible for domestic activities</b>				
No	1		1	
Partially	0,68 (0,32 – 1,42)	0,31	1,12 (0,45 – 2,75)	0,80
Fully	1,30 (0,54 – 3,12)	0,55	1,14 (0,40 – 3,23)	0,80
<b>Influence of domestic activities on routine</b>				
No	1		1	
Little	2,44 (0,84 – 7,09)	0,09	8,67 (1,07 – 69,92)	<b>0,04</b>
A lot	1,83 (0,61 – 5,48)	0,28	10,27 (1,25 – 84,13)	<b>0,03</b>

**Table 4**

*Final Multinomial Regression Model to Evaluate Possible Factors Associated with the Change regarding the Help of Adults in Children's Schoolwork during the Pandemic (n=466)*

	Adjusted Analysis (Less x Equal) CR (95%CI)	P	Adjusted Analysis (More x Equal) CR (95%CI)	P
<b>Independent variables</b>				
<b>Child's Gender</b>		0,35		<b>0,03</b>
Male	1		1	
Female	1,58 (0,61 – 4,11)		1,69 (1,04 – 2,74)	
<b>Child's Age</b>	0,89 (0,66 – 1,19)	0,43	1,23 (1,08 – 1,39)	<b>&lt;0,01</b>
<b>Child's School Network</b>				
Public	1		1	
Private	1,24 (0,27 – 6,22)	0,80	1,55 (0,68 – 3,55)	0,30
Not attending school	0,57 (0,04 – 7,94)	0,67	0,06 (0,01 – 0,60)	<b>0,02</b>
<b>Guardian's Gender</b>		0,22		0,46
Male	1		1	
Female	0,27 (0,03-2,17)		0,78 (0,40 – 1,51)	
<b>Guardian's Age</b>	-		-	
<b>Number of Residents</b>	1,36 (0,72-2,59)	0,35	1,47 (1,06 – 2,04)	<b>0,02</b>
<b>Number of Contributors</b>	-		-	
<b>Guardian's Education</b>	-		-	
Up to High School Completed				
Higher Education				
<b>Household Income</b>		0,10		0,84
≤ 2 minimum wages	1		1	



	Adjusted Analysis (Less x Equal) CR (95%CI)	P	Adjusted Analysis (More x Equal) CR (95%CI)	P
> 2 minimum wages	4,34 (0,74 – 25,38)		0,89 (0,29 – 2,75)	
<b>Responsible for domestic activities</b>				
No	1		1	
Partially	0,69 (0,19 – 2,54)	0,57	1,32 (0,66 – 2,64)	0,43
Fully	0,70 (0,13 – 3,62)	0,67	2,37 (1,01 – 5,56)	<b>0,04</b>
<b>Influence of domestic activities on routine</b>				
No	-		-	
Little				
A lot				

Note. \*Variables whose values are not shown had  $p > 0.20$  in the unadjusted analysis and were not included in the final model.

## Discussion

The findings of this study point to changes in parent-child interactions after the onset of the COVID-19 pandemic. Parents began to provide more assistance to their children with schoolwork and allowed their child to make greater use of electronic devices for entertainment. However, the frequency with which children witnessed conflicts remained the same.

The increased use of electronic devices is supported by other studies (Eales et al., 2021; Eyimaya & Irmak, 2021). The meta-analysis published by Trott et al. (2022) identified a significant increase in the use of electronic devices among children (0.6 h/day- 0 to 5 years, 1.4 hours/day- 6 to 10 years), as well as adolescents and adults.

Increased screen time has various short- and long-term consequences, including decreased physical activity, depression, sedentary behavior, sleep disturbances, and mood disorders in children (Moore et al., 2020; Schmidt et al., 2020; Sikorska et al., 2021; Dutta et al., 2020; Windiani et al., 2021; Trott et al., 2022). Behavior changes had been evidenced pre-COVID-19 (Stiglic, & Viner, 2019), but isolation may have exacerbated these effects.

Although increased screen time was partly due to online school and work, Trott et al. (2022) found all age groups also increased screen time for pleasure. These results highlight increased leisure screen time, reducing interaction with others, including children.

Trott et al. (2022) found a direct association between increased loneliness and screen use, consistent with pre-pandemic research (Hunt et al., 2018). Increased isolation and screen time decrease quality family time, potentially affecting emotional bonds and family cohesion.

Family cohesion facilitates positive and healthy behaviors in children, as there is a high sense of belonging, affection, and support among family members, which becomes even more important during the pandemic due to increased stress and anxiety experienced by family members (Park & Cho, 2022). Furthermore, pre-pandemic studies demonstrated the correlation between negative affect (aversive mood states, such as guilt and fear- which also increased in a pandemic scenario) with symptoms and diagnoses of anxiety and depression (Watson et al., 1988).

It is important to note that the emotions triggered by the pandemic in some family members end up affecting everyone. Several studies have concluded that the increased distress, anxiety, and stress of parents due to COVID-19 led to demeanor issues, hyperactivity, and



distress in their children (Essler et al., 2021; Rosen et al., 2020; Spinelli et al., 2020). In a study conducted in Singapore, parents who reported higher stress levels due to COVID-19 became more rigid and distant from their children.

Bate et al., 2021 concluded that parents with low levels of emotional problems did not alter their children's emotional health; however, children whose parents had medium and high emotional problems experienced affected emotional health as positive parent-child interactions decreased. At the same time, a good parent-child relationship can also alleviate stress levels and improve the emotional health of the parents (NICHD, 1999).

It is essential to consider the difficulty faced by parents at this time, as they need to provide a secure attachment for their children to ensure their healthy development while also needing secure attachments themselves due to the uncertain times. With so many daily concerns, being present with their children can be particularly challenging (Bate et al., 2021).

Regarding the type of school attended by the children in this study, the results corroborate a survey of 71,533 Brazilian students, which, although not considering the use of tablets and smartphones, concluded that screen time in front of computers, televisions, and video games was higher among private school students than public school students (Rocha et al., 2021). In South Africa, preschoolers from high-income families had higher rates (67%) of excessive screen time (Tomaz et al., 2020).

However, there is no consensus in the literature on this topic, as other studies concluded that children from low-income families tend to not have their screen time well managed during school closures and social distancing periods (Lee et al., 2022). Considering that private schools generally serve children from middle to upper socioeconomic classes, research by Common Sense (2011) and Anderson and Whitaker (2010) suggests that low-income children spend more time in front of screens than those from high-income families.

Another finding of this study was the influence of household chores on family life after the pandemic's onset. Respondents who reported that household chores influenced their routine also reported that their children witnessed more conflicts. Pre-pandemic studies already suggested that economic stress increases relationship conflicts and intimate partner violence (IPV) (Conger et al., 2010; Neppl et al., 2016). Feelings of fear and uncertainty during the pandemic, whether due to the possibility of infection, loss of loved ones, or job loss, coupled with compulsory isolation, which increased couples' contact time, may have increased detrimental relationship behaviors. A study by Ahuja and Khurana (2021) found that the occurrence of external stressors reduces the time and attention previously devoted to activities that promoted couples' intimacy and increases the possibilities of conflict. The changes brought about by the pandemic, such as the need to manage work now carried out at home alongside household chores, shifted the focus of couples' interactions from emotional connection to moments of displeasure (Kanika et al., 2021).

Nelson et al. (2009) suggest that dissatisfaction with marital relationships makes parents more prone to express negative affections and be less emotionally available for their children. A study conducted by Erel & Burman (1995) concluded that when the parents' relationship is negative, parent-child interactions tend to be negative as well. Cui et al. (2007) corroborate this, stating that discontent and disagreements transfer to parent-child interactions, increasing conflicts and chaos in the family environment, which may heighten the risks of psychological and economic dysfunctions in adulthood. These consequences

raise long-term concerns about the development and performance of these children in the future.

On the other hand, parents who participated in this study reported that after the pandemic began, they started assisting their children with school tasks more frequently, corroborating the study conducted by Jong et al. (2022), where mothers reported a significant increase in time spent helping their children with homework, averaging one to three times per day. It is worth noting that, similar to the present study (88%), Jong et al. (2022) research had a very low response rate from fathers, and thus only analyzed conflicts between mothers and children during homework assistance.

Although the parents' role as caregivers expands when their child starts school due to academic responsibilities (Jong et al, 2022), school closures further increased this responsibility, as there was no face-to-face contact with teachers and potential difficulties with online classes. A study conducted in Africa revealed that 60% of children do not have internet access (Gunnlaugsson, 2020).

In a way, this context shift brought parents and children closer together, offering new opportunities for family connection (Chu et al., 2021; McArthur et al., 2021). Parental involvement in school tasks, besides being the most common way to engage with the school environment, is crucial for their children's school adaptation, potentially facilitating or hindering academic development and motivation (Hoover-Dempsey et al., 2001., Moè et al., 2020; Moroni et al., 2015). However, external stress associated with excessive tasks may have affected parents' ability to manage home schooling while needing to control their children's behaviors and emotions during confinement (Pomerantz et al., 2007).

In Jong et al. (2022) research, it was evidenced that increased assistance with school tasks was accompanied by a rise in mother-child conflict. The same study found that mothers with lower self-efficacy in assisting with such tasks were more inclined to have conflicts during this work. Parents' self-efficacy often reflects beliefs about their competence in raising children correctly, guiding and supporting them to enhance their development (Coleman & Karraker, 1998; Jones & Prinz, 2005). Some factors can influence self-efficacy, including emotional state, educational level stemming from socioeconomic status, household chaos (high levels of disorganization, limited structure, lack of daily routines, and high noise levels), and school support (Bandura, 1997; Bottorff, 1996).

The present study found that girls were more likely to receive help with school tasks than boys; however, no other studies corroborating this result were found. In Touloupis's (2021) research, conducted with children with learning difficulties, neither the child's age nor gender had significant relevance in receiving more or less assistance with school tasks. Tan and Goldberg (2009) found that fathers tended to be more involved in activities with boys, both in play and school tasks, while mothers did not show this distinction.

However, the fact that children received more homework assistance as they aged supports other studies that explain the need for parents to be more involved in such activities during elementary school and gradually decrease involvement as children grow and develop more autonomy, acting more independently before school tasks (Barnard, 2004; Epstein & Lee, 1995; Hoover-Dempsey & Sandler, 1997). As the range of this research begins at 3 years of age, it is presumed that these children do not receive this type of help since they do not attend school yet, in line with the research results, and receive more attention in this regard as they grow.

It is important to mention that the collection of data by internet is one of the limitations of this study, as this potentially affects the ability to reach all population strata (such as people with lower education/income levels). Additionally, there was a concentration of responses in certain regions of the country, hindering sample representativeness. Therefore, the involuntary exclusion of these parents may have underestimated or overestimated the results. Another point to be observed in interpreting the results is that as access to electronic devices, as well as the control of their use, varies according to social class, and the survey conducted reached mainly high family income respondents. Moreover, our sample was predominantly composed of mothers, who are culturally more inclined to undertake domestic tasks and assist children with schoolwork.

### Conclusion

The present study pointed out significant changes in parent-child interactions due to the isolation required by the COVID-19 pandemic. Parents reported that after the onset of the COVID-19 pandemic, they began assisting their children more with schoolwork and allowed their children to make greater use of electronic devices for entertainment. However, the frequency at which children witnessed conflicts remained the same as before the pandemic.

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