



# Psychological Wellbeing, Dyadic Adjustment, and Parental Stress among Spanish Families during the COVID-19 Outbreak

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## Abstract

Due to COVID-19, many countries, like Spain, imposed lockdown on the entire population to prevent the virus from spreading. The purpose of this exploratory study is to investigate the severity of psychological symptoms, dyadic adjustment, and parental stress of parents during the first three weeks of the outbreak. It also aims to identify several risk factors that contribute to this distress. A total of 727 parents completed a form on an online platform with sociodemographic data, BSI-18, EAD-13, and the Spanish version of the PPS. Linear regression analyses were used to explore the significant associations between the sample characteristics (sociodemographic variables and their lockdown circumstances) and parents' psychological symptoms, dyadic adjustment, and parenting stress level during the COVID-19 epidemic. Most parents maintained good emotional, personal, conjugal, and family stability; however, female gender, not living with the partner, having a child with a mental disorder and were unable to balance the work and family lives were significantly associated with greater psychological distress. Being receiving psychiatric or psychological treatment has also been associated with poorer psychological and partner adjustment during the outbreak. It is essential to continue researching the impact of lockdowns on families so that, both the government and public health authorities, can offer resources to the most vulnerable families.

**Keywords** Families · Psychological well-being · COVID-19 · Outbreak · Spain

## Highlights

- The majority of parents maintained adequate emotional and dyadic adjustment during the first three weeks of the lockdown.
- Women and those parents who have been confined without their partners were more psychologically affected.
- Difficulties in reconciling work and family life have been a risk factor associated with the impact of confinement.
- Families with a child with a psychiatric disorder have shown greater psychological distress and more parental stress.
- Confinement has had a greater impact on those with previous psychological problems.

The novel coronavirus (COVID-19), which originated in Wuhan, China, has spread rapidly all over the world since December 2019, causing an outbreak of acute infectious pneumonia. Faced with this pandemic China and later other countries, imposed lockdowns on their entire population to

prevent the virus from spreading, following the recommendation of the World Health Organization (WHO).

In Spain, the government declared a 15-day state of alarm on 14 March 2020 to deal with the health emergency caused by COVID-19. Since then, confinement measures involving the isolation of the entire population were approved and implemented. Throughout the country, social interactions were restricted, freedom of movement was curtailed. Nursery schools, schools, universities, entertainment establishments and shops (except for those selling staple goods) were closed. Sporting events, funerals and all forms of assembly were prohibited (Official State Gazette [henceforth, BOE] no. 67, 2020). As the pandemic

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proceeded, some workers lost their jobs or began to work remotely, job insecurity increased (Ruiz-Frutos and Gómez-Salgado, 2021), formal education started to be held in home classrooms, exams were postponed, and the burden of childrearing grew (Paricio del Castillo & Pando Velasco, 2020). Spain was experiencing an unprecedented situation, and the impact that the lockdown would have on the population was unknown.

This was not the first time this type of measure was being applied in other countries. In certain areas of China and Canada, quarantines were imposed during the 2003 Severe Acute Respiratory Syndrome (SARS) outbreak, as it was in entire towns in many countries in West Africa during the Ebola outbreak in 2014. Preceding lockdowns gave rise to different studies that demonstrated the sweeping psychological impact that these measures can have on the general population (see Brooks et al., 2020 for a review), just as the first studies on COVID-19 did (Lei et al., 2020; Mazza et al., 2020; Tian et al., 2020; Wang et al., 2020; Yue et al., 2020). Despite this, Kaufman et al., (2020) predicted that due to the virus's quick spread and the prolonged obligatory lockdown, the psychological impact of COVID-19 would be greater than other pandemics.

A variety of studies conducted internationally and in Spain showed that levels of anxiety, depression and stress increased during the COVID-19 lockdown (Rodríguez-Rey et al., 2020; Jané-Llopis et al., 2021; Odriozola-González et al., 2022; Wang et al., 2020). Women (Jané-Llopis et al., 2021; Rodríguez-Rey et al., 2020; Yue et al., 2020; Wang et al., 2020), younger people (Gómez-Salgado et al., 2020; Jané-Llopis et al., 2021), those with an undergraduate education or less (Jané-Llopis et al., 2021; Tian et al., 2020), those who had lower average household income (Lei et al., 2020; Yue et al., 2020), divorced and widowed persons (Tian et al., 2020), those more worried about being infected, those who had no psychological support (Lei et al., 2020), people with ill family members, those that worked outside the home (Mazza et al., 2020) and those who lost their job during the health crisis (Rodríguez-Rey et al., 2020) had significantly more psychological symptoms.

Concerning to the impact of the lockdown on couples, different studies suggested that dealing with the external stress related to COVID-19 probably increases damaging dyadic processes (more hostility and withdrawal, less support), which would undermine the quality of the conjugal relationship (Pietromonaco & Overall, 2021) and increase the risk of suffering from intimate partner violence (Jarneck & Flanagan, 2020). According to the study conducted by Günther-Bel et al., (2020) in Spain, partners' dyadic adjustment can be harmed, yet lockdown may also be an opportunity for some couples to improve their relationship. According to this same study, the couples affected the most might be those with children under their care. Other studies

conducted in our country, such as the one by Gómez-Salgado et al., (2020), concur that having children under one's care during the lockdown may have been one of the risk factors for suffering from emotional distress.

To understand the impact of the pandemic on families, Prime et al., (2020) suggested a conceptual framework based on different systemic models of human development and family functioning. According to their model, the effects of the pandemic would impact children's wellbeing in a cascading fashion: the lockdown would generate higher levels of anxiety among parents, impacting the quality of marital relations and parent-child relations. In parallel, they underscore the link between the wellbeing of the caregiver, children, and family, with a relationship that is not one-way. Similarly, other studies confirmed the relationship between the impact of the lockdown on parents and their children's wellbeing (Dalton et al. 2020; Lacomba-Trejo et al., 2020; Marchetti et al., 2020; Mazza et al., 2020; Spinelli et al., 2020). Dalton et al., (2020) stated that the impact of the lockdown on adults will have direct repercussions on children in that they are a faithful reflection of their parents. According to Spinelli et al., (2020), the impact of the quarantine on children's emotional and behavioral problems is mediated by their parents' individual and dyadic stress. Studies show that parents' emotional state determines whether they can properly meet their children's needs (Marchetti et al., 2020; Mazza et al., 2020).

High levels of suffering and emotional exhaustion on the part of families were recorded during the pandemic (Marchetti et al., 2020), and caring for children was one of the parents' prime concerns at that time (Fontanesi et al., 2020). Eighty percent of Italian parents with children aged birth to 13 reported high levels of psychological suffering in the study by Marchetti et al., (2020), and 17% reported significant exhaustion with child-rearing, when in previous studies with the general population this latter effect tends to hover at around 1.3–8.8%. The study by Fontanesi et al., (2020) added that if any of the children suffered from a physical or mental illness, the level of parental exhaustion is higher, and they perceive less social support. Likewise, the other high-risk factors related to exhaustion with child-rearing were being a single woman, having small children, having children with special needs, and having many children (Marchetti et al., 2020; Mazza et al., 2020). In contrast, Yue et al., (2020) found that fewer than 4% of the parents surveyed experienced moderate or severe levels of psychological problems. These good scores may be explained by the fact that the respondents were in an area that was not heavily affected by COVID-19 (there had been no deaths from Covid), and the parents were evaluated at a time when the outbreak was under control.

Either way, the COVID-19 pandemic has been a stressful situation and a difficult challenge for parents. Some of them

have had to go to work with the fear of infection, while others have lost their jobs or have seen their activity and income reduced. Others have had to work from home while dealing with their children's school demands (Coyne et al., 2020) as they have lost (or experienced changes in) the support networks (school, extended family, caregivers, therapists) that they previously had. Despite this, each parent's response will have been different. Some parents will have been overwhelmed by the demands of the situation and will have felt so exhausted (burnout) that they have not been able to respond adequately, causing situations of violence among family members (Griffith, 2020; Roje Dapic et al., 2020), while for others, this time of difficulty has also been able to provide creative opportunities, such as building stronger relationships with their children and adolescents (Cluver et al., 2020; Forti Buratti et al., 2021).

The transactional perspective of stress (Lazarus & Folkman, 1986) and theoretical models of family stress (Hill, 1986) have shown that different stressful events do not affect every person or group equally. People not only perceive the threats of stressful situations differently, but they also use different skills, abilities, and resources, both personal and social, to cope with potentially stressful conditions. From this perspective, not only is the stressor important, but so is the person's ability to cope with it. The results of Guos's et al., (2020) study highlight the association between coping styles and mental health issues in the context of Covid-19. A problem-focused coping style decreased symptoms of depression and post-traumatic stress while an emotion-focused coping style exacerbated mental health symptoms.

Within the framework of these events and bearing in mind that the state of alarm was extended six times and lasted more than three months in Spain, it is important to continue to research how this situation affected parents' psychological wellbeing. The studies conducted in our country which have been published to date have provided information on the wellbeing of general population during the early weeks of the lockdown, but this research seeks to study the emotional impact of the lockdown, focusing exclusively on Spanish parents with young children under their care during the confinement. In addition, the presence of psychological symptoms will not only be studied, but also the couple's relationship and parental stress will be explored. As outlined above, people with children under their care are one of the groups that have experienced the most tension during the lockdown, and therefore it is especially important to explore how it affected them and what factors have been associated with this discomfort. This study has two aims. The first is to study the severity of the symptoms of anxiety, depression, and somatization of parents of young children and to analyze the dyadic adjustment and parental stress of those parents; the second is to identify

sociodemographic factors and lockdown circumstances that may be associated with psychological wellbeing, dyadic adjustment, and parental stress. For the first aim, in accordance with the literature reviewed (Lei et al., 2020; Odriozola-González et al., 2022; Rodríguez-Salgado et al., 2020; Wang et al., 2020), we hypothesized that the subjects studied would present high levels of psychological symptoms (Jané-Llopis et al., 2021; Wang et al., 2020), poor dyadic adjustment (Pietromonaco & Overall, 2021) and high parental stress (Fontanesi et al., 2020). For the second research goal, we expected to find that certain socio-demographic factors, like gender or educational or economic level (Lei et al., 2020; Rodríguez-Salgado et al., 2020) and certain lockdown circumstances, like having been able to balance work with housework and children (Lei et al., 2020), were associated with parents' wellbeing during these first three weeks. The study seeks to provide information on the effects that the lockdown measure had for parents to contribute to the design of psycho-social measures that allow families to face this type of experience or similar ones with more guarantees.

## Method

### Participants

A total of 727 parents participated in the study. Inclusion criteria were: (a) at least 18 years old and (b) a parent to at least one child, aged 6–18 years, (c) who was living with them during the lockdown in Spain. Either the father or mother of each family, but not both parents, participated.

Of the total number of participants, 631 (86.2%) were women and 87 (13.2%) men. The distribution by sex of the Spanish general population is 49.0% women and 51.0% men (INE, 2021). The participants varied in age from 28 to 67 ( $M = 43.9$ ,  $SD = 5.9$ ); 83.1% lived with their partner, and 64.9% had a high educational level (Bachelor's, master's, or doctorate) while in the general Spanish population, the percentage of the population with university education is 17% (INE, 2021). 85.3% of them had between one and two children and 22.8% had a child diagnosed with a mental disorder. Descriptive information on the sample is reported in Table 1.

The participants had been in lockdown an average of 18.4 days ( $SD = 6.6$ ) and 88.9% of them responded that neither they nor any member of the family with whom they were confined had shown symptoms of COVID-19. In terms of their homes, 27.4% of the participants were in lockdown in homes measuring less than 70 square meters, and around 60% of the participants had access to private patios or terraces. Moreover, 18.3% experienced some change in medical treatment because of the pandemic.

**Table 1** Descriptive data of sociodemographic variables and lockdown circumstances ( $N = 727$ )

Characteristics	<i>n</i>	%
Gender		
Male	99	13.2
Female	631	86.8
Currently live with couple		
Yes	604	83.1
No	123	16.9
Number of children		
1	216	29.7
2	404	55.6
3	89	12.2
>3	18	2.5
Education		
Primary studies	5	0.7
Secondary studies	66	9.1
High school	91	12.5
Superior grade	93	12.8
University	294	40.4
Master	144	19.8
Doctorate	34	4.7
Family monthly net income		
Less than 600 euros	18	2.5
601 – 1200 euros	74	10.2
1201 – 1800 euros	126	17.3
1801 – 2400 euros	149	20.5
2401 – 3600 euros	204	28.1
More than 3600 euros	156	21.5
Children diagnosed with a mental disorder		
Yes	166	22.8
Neurodevelopmental disorders	113	68.1
Anxiety disorders	19	11.4
Disruptive disorders	11	6.6
Depressive disorders	6	3.6
Obsessive compulsive disorder	3	1.8
Personality disorders	4	2.4
Others	10	6.1
No	561	77.2
Psychological treatment		
Yes, currently	88	12.1
Yes, in the past	280	38.5
No, never	359	49.4
	<i>M</i>	<i>SD</i>
Age	43	5.9
Years of couple relationship	17.6	7.2

During this period, 56.3% of parents who were teleworking considered that they had managed to balance work with family duties.

## Measures

### Sociodemographic data and lockdown circumstances

This is a cross-sectional observational study. Sociodemographic variables were collected on gender, age, education, monthly net family income, whether the respondent currently lived with their partner, length of the conjugal relationship, current psychological support, number of children and children's mental health. Other questions related to the lockdown circumstances were collected: number of days in lockdown, home size, access to patios and terraces, the balance between family and work life (in the case of teleworking), changes in medical treatments due to the pandemic and presence of COVID19 symptoms (themselves and/or the family members with whom they cohabitate).

### Psychological symptoms

Psychological symptoms were assessed by the Brief Symptom Inventory–18 (BSI-18) (Derogatis, 2001). The BSI-18 is a self-reported symptom checklist consisting of 18 items taken from the 53-item Brief Symptom Inventory. Each BSI-18 item describes a symptom to be rated by respondents along a five-point scale according to how much they have been bothered by the symptom in the prior week. Scores are summarized on the Global Severity Index (GSI). The BSI-18 also includes three symptom scales, namely Somatization, Depression and Anxiety, each comprised of six items. Raw scores on the BSI-18 are converted to T-scores based on gender-specific normative data. Participants with GSI T-scores  $\geq 63$  were defined as having clinically significant psychological distress (high distress) (Derogatis & Spencer, 1993). The BSI measures a one-dimensional construct of general psychological distress with excellent reliability ( $\alpha = 0.932$ ). The Cronbach's alpha coefficients of the subscales are good: Somatization ( $\alpha = 0.884$ ), Depression ( $\alpha = 0.832$ ) and Anxiety ( $\alpha = 0.847$ ).

### Dyadic adjustment

Couple adjustment was measured by the Dyadic Adjustment Scale EAD-13 (Santos et al., 2009), an abbreviated version of the Spanish version of Spanier's Dyadic Adjustment Scale (DAS; 1976). Based on 13 items, scores are obtained on 3 subscales (Consensus, Satisfaction and Cohesion), yielding a total Dyadic Adjustment score. Only participants who cohabitated with their partners responded to the scale. The cut-off point is 44, and higher scores indicate better dyadic adjustment. In our sample, the subscales had internal consistency values of 0.778

(Satisfaction), 0.683 (Cohesion), 0.815 (Consensus) and 0.860 (Total scale).

### Parental stress

The level of parental stress was evaluated by the Spanish version of the Parental Stress Scale or PSS (Oronoz et al., 2007). The PSS was originally developed by Judy Berry & Warren Jones (1995). The Spanish version of the PSS contains 12 statements, with 6 statements addressing negative and stressful aspects of parenting (Stressors) and 6 statements addressing positive aspects of parenting (Rewards), thus considering the dichotomous nature of the parenting experience. Parents rate the statements for agreement using a 5-point response scale (1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, 5 = strongly agree). Higher scores on the Stressors subscale indicate more parenting stress, while higher scores on the Rewards subscale indicate more satisfaction with the parental role. Internal consistencies in our sample were 0.918 (Rewards) and 0.833 (Stressors).

### Procedures

The data were collected via an online platform three weeks after the state of alarm for COVID-19 was declared (from March 29 to April 5, 2020). The survey's link was posted on different social media to achieve maximum dissemination, including snowball sampling via WhatsApp. The participation of both mothers and fathers was requested. The families did not earn any compensation for their participation, but the researchers promised to send them the results once the investigation was finished. The survey took approximately 25 min to fill out, and participation was anonymous, voluntary, and free. Informed consent was obtained from each participant electronically before starting the research. Participants could withdraw from the survey at any time without having to provide any justification. The study was conducted in accordance with the Helsinki Declaration and was approved by the Ethics Research Committee of the Institut Universitari de Salut Mental Vidal i Barraquer, Ramon Llull University.

### Statistical Analysis

Data from the completed online questionnaires were analyzed using SPSS version 26.0. Descriptive statistics were calculated to test the severity of the symptoms of anxiety, depression, and somatization of parents, and explore the dyadic adjustment and parental stress of those parents. The scores of the BSI-18, EAD-13 and PSS subscales were expressed as means and standard deviations. Linear regression was used to calculate the univariate associations

**Table 2** Descriptive statistics of the BSI-18, EAD-13, and PSS scales

Scale	N	Range	M	SD
<b>BSI – 18</b>				
Depression	727	41–82	52.6	8.1
Anxiety	727	39–82	54.1	9.2
Somatization	727	41–82	50.4	10.2
GSI	727	36–82	52.8	9.3
<b>EAD – 13</b>				
Satisfaction	604	5–24	18.4	3.2
Consensus	604	1–25	19.3	4.1
Cohesion	604	0–14	8.9	3.3
EAD Total	604	14–63	46.7	8.7
<b>PSS</b>				
Stressors	727	6–30	15.3	5.6
Rewards	727	6–39	25.7	5.1

*BSI - 18* Brief Symptom Inventory, *IGS* Global Severity Index, *EAD - 13* Dyadic Adjustment Scale, *PSS* Parental Stress Scale

between each of the sociodemographic variables and lockdown circumstances with and parents' psychological symptoms, dyadic adjustment, and parenting stress level during the COVID-19 epidemic.

## Results

### Severity of Psychological Symptoms, Dyadic Adjustment and Parental Stress

The availability of population reference values for the instrument used (BSI-18) allowed the reporters' scores to be compared with the general normative Spanish population. The descriptive data shown in Table 2 indicate average scores on depression, anxiety, and somatization symptoms within the normal range (T Scores between 50.4 and 54.1) on all scales. Despite this, 16.1% of the parents showed clinical scores ( $T \geq 63$ ) on the anxiety scale, 13.4% on the somatization scale, 10.3% on the depression scale and 13.5% on the GSI scale.

The mean score on dyadic adjustment (EAD-13 total) was 46.7, with a minimum of 14 and a maximum of 63 ( $SD = 8.7$ ). Most parents who lived with their partner reported adequate dyadic adjustment in the third week of the outbreak, while 31% of the parents situated their dyadic satisfaction under the cut-off point (average score  $\geq 44$ ).

Regarding the two dimensions of the PSS, the mean scores were 15.3 for Stressors and 25.7 for Rewards, with a minimum of 6 and a maximum of 30 and 39, respectively. These scores indicate that, in general, the parents reported more levels of parenting rewards than stressors in their parental role during this early period of the pandemic.



## Associations of Sociodemographic Variables and Lockdown Circumstances with Parents' Psychological Symptoms, Dyadic Adjustment and Parental Stress

As shown in Table 3, female gender was significantly associated with higher scores in the Global Severity Index ( $\beta = 0.176$ ,  $SE = 1.05$ ,  $p < 0.001$ , 95% CI: [2.62, 6.77]) and lower scores in the EAD-13 total scale ( $\beta = -0.103$ ,  $SE = 1.05$ ,  $p = 0.013$ , 95% CI: [-4.69, 0.54]). Younger participants obtained higher scores in dyadic adjustment ( $\beta = -0.132$ ,  $SE = 0.07$ ,  $p = 0.006$ , 95% CI: [-0.347, -0.057]) and greater rewards in their parental role ( $\beta = -0.103$ ,  $SE = 0.03$ ,  $p = 0.032$ , 95% CI: [-0.162, -0.007]). Despite this, the increase in the number of days confined decreased the scores obtained on the reward scale ( $\beta = -0.103$ ,  $SE = 0.04$ ,  $p = 0.012$ , 95% CI: [-0.136, -0.017]). Having been confined with the partner ( $\beta = 0.099$ ,  $SE = 2.1$ ,  $p = 0.019$ , 95% CI: [0.816, 9]) and having had access to patios or terraces during confinement was also associated with better psychological adjustment ( $\beta = -0.135$ ,  $SE = 0.81$ ,  $p = 0.001$ , 95% CI: [-4.26, -1.08]). Having children with a psychiatric diagnosis was also associated with more distress symptoms ( $\beta = 0.089$ ,  $SE = 0.92$ ,  $p = 0.035$ , 95% CI [0.138, 3.78]) and more parental stress ( $\beta = 0.170$ ,  $SE = 0.57$ ,  $p < 0.001$ , 95% CI [1.14, 3.38]). To have been able to reconcile work life with childcare were significantly associated with better psychological adjustment ( $\beta = -0.129$ ,  $SE = 0.74$ ,  $p = 0.001$ , 95% CI [-3.878, -0.939]), better dyadic adjustment ( $\beta = 0.123$ ,  $SE = 0.74$ ,  $p = 0.003$ , 95% CI [0.721, 3.631]) and less parental stress ( $\beta = -0.188$ ,  $SE = 0.45$ ,  $p < 0.001$ , 95% CI [-3, -1.2]). Parents who were already receiving psychiatric or psychological treatment at the beginning of the pandemic were also those who presented more distress ( $\beta = 0.126$ ,  $SE = 1.22$ ,  $p = 0.001$ , 95% CI [1.51, 6.33]) and dyadic maladjustment ( $\beta = -0.096$ ,  $SE = 1.24$ ,  $p = 0.019$ , 95% CI [-5.35, -472]) during these three first weeks.

Other variables including educational level, family monthly net income, number of children, years of the couple relationship, presence of covid symptoms or the alteration of any medical treatment due to the virus were not associated with BSI-18, EAD-13, and PSS scores.

## Discussion

Despite the adversity of this juncture, the results related to our first objective reveal that only 13.5% of the parents surveyed showed intense levels of psychological distress; in fact, these levels were slightly lower than those reported in other studies conducted internationally (Mazza et al., 2020; Wang et al., 2020) and in Spain (Jané-Llopis et al., 2021;

Odriozola-González et al., 2022; Rodríguez-Rey et al., 2020). Likewise, our findings showed that two-thirds of the parents reported adequate dyadic adjustment during the first three weeks of the lockdown (Günther-Bel et al., 2020). Similar conclusions were reached regarding the results on parenting stress since most of the parents scored within normative ranges on the PSS scales during the third week of the lockdown. Apparently, for many Spanish parents, the lockdown became a time of greater closeness and cohesion and improved conjugal communication, as suggested by Günther-Bel et al., (2020) and was an opportunity to get closer to and share more time with their children, as noted by Forti Buratti et al., (2021). Longitudinal studies will have to confirm the stability of this well-being over the months. For now, what we know is that studies conducted in our country between six and ten weeks of confinement report higher rates of anxiety and depression than those conducted during the first two weeks of confinement (Jané-Llopis et al., 2021). In addition, one of the first longitudinal studies carried out abroad, confirms that the population between 35 and 49 years old presented more anxiety and depression problems during 2020 than during 2019 (van der Velden et al., 2020).

Regarding the second objective, the study identified several variables associated with an increased risk of psychological distress. In line with previous studies (Gómez-Salgado et al., 2020; Jané-Llopis et al., 2021; Lei et al., 2020; Liu et al., 2020; Rodríguez-Rey et al., 2020; Wang et al., 2020), the relationship between female gender and a greater psychological distress during confinement was confirmed. The finding may also be linked to evidence in the previous literature that women tend to be more vulnerable to experiencing mental health problems (Bones Rocha et al., 2010; Henares Montiel et al., 2020). Not living with partners was also associated with high levels of psychological distress, but not with parental stress, in contrast to what was reported by Marchetti et al., (2020). In the same line, contrary to our hypotheses and the results described by other researchers, exposure to covid symptoms (Guo et al., 2020; Odriozola-González et al., 2022), level of education and income were not associated with parental emotional well-being during the first period of the lockdown (Jané-Llopis et al., 2021; Lei et al., 2020; Tian et al., 2020; Yue et al., 2020).

The present study also found that younger parents maintained a good dyadic adjustment and were rewarded in their role as parents. It is possible that young parents with young children may have enjoyed their children and positively valued the shared time that confinement imposed on them. However, the fact that the passage of days in confinement had a negative impact on the scale of parental rewards leads us to think that this enjoyment that we observed during the first three weeks may be affected as the days went by. Longitudinal studies should confirm whether

**Table 3** Linear regression of demographic variables and lockdown circumstances predicting parents' psychological symptoms, dyadic adjustment and parental stress

Variables	BSI – 18			EAD-13			PSS									
	Global severity index			Total scale			Rewards			Stressors						
	ΔR <sup>2</sup>	F	β	T	ΔR <sup>2</sup>	F	β	t	ΔR <sup>2</sup>	F	β	t				
Gender <sup>a</sup>	0.116***	6.27***	0.176***	4.44***	0.039***	2.72***	-0.103*	-2.47*	0.029**	2.22**	-0.067	-1.63	0.063***	3.776***	0.058	1.43
Age			-0.024	-0.52			-0.132**	-2.73**			-0.103*	-2.15*			-0.028	-0.58
Education			0.024	0.53			-0.003	-0.06			-0.043	-0.89			0.075	1.59
Family monthly net income			-0.060	-1.29			0.040	0.84			0.004	0.08			0.042	0.88
Currently living with couple <sup>b</sup>			0.099	2.35*			0.033	0.68			-0.039	-0.88			0.028	0.65
Years of couple relationship			0.026	0.57			-0.016	-0.37			0.032	0.64			0.047	0.96
Number of children			0.009	0.21			-0.041	-0.92			0.005	0.12			0.020	0.50
Children diagnosed with mental disorder <sup>c</sup>			0.089*	2.11*			-0.028	-0.68			-0.061	-1.41			0.170***	3.96***
Confined days			-0.024	-0.61			0.016	0.35			-0.103*	-2.53*			0.016	0.40
Home size (m <sup>2</sup> )			0.026	0.61			-0.007	-0.17			0.044	1.02			-0.073	0.08
Access to terraces/patios <sup>c</sup>			-0.135***	-3.29***			0.028	0.67			0.000	-0.01			-0.006	-0.13
Covid-19 symptoms <sup>c</sup>			0.044	1.12			-0.057	-1.35			0.025	0.60			-0.024	-0.58
Medical treatment affected <sup>d</sup>			0.071	1.79			0.123**	2.93**			-0.008	-0.18			-0.001	-0.03
Family work balance <sup>c</sup>			-0.129***	-3.21***			-0.096*	-2.34*			0.133**	3.18**			-0.188***	-4.59***
Current psychological/psychiatric treatment <sup>b</sup>			0.126***	3.20***							-0.043	-1.05			0.067	1.67

<sup>a</sup>Male = 1, Female = 2. <sup>b</sup>Yes = 1, No = 2. <sup>c</sup>Yes = 1, No = 0

\**p* < 0.05, \*\**p* < 0.01, \*\*\**p* < 0.001

the satisfaction in the parental role of the young parents was maintained over time or whether it declined due to parents' fatigue.

Another finding was the association between being able to reconcile work and family life with the stress experienced by parents during confinement. As stated by different international studies (Lonska et al., 2021; Sandoval-Reyes et al., 2021), it seems that teleworking, previously considered as a positive factor that would promote work-life balance, in a pandemic situation did not achieve its goal. For many parents, having to telework while their children were at home had a negative impact on their psychological well-being and did not allow for work-life balance.

Our results show that parents of children with mental disorders also presented worse psychological adjustment and higher parental stress during these weeks. As different studies have found, the lockdown may have led to worse behavior and emotional deregulation of children with previous psychopathologies (Caffo et al., 2020; Colizzi et al., 2020; Zhang, 2020), thus complicating the day-to-day lives of families and negatively affecting their psychological adjustment and parental stress.

Similarly, this study seems to confirm that adults with previous psychopathology were also particularly vulnerable (Odriozola-González et al., 2022; Yao et al., 2020). Participants who were already receiving psychiatric or psychological treatment at the time of confinement had the highest rates of psychological and dyadic maladjustment. As explained in the introduction, these individuals may have found it more difficult to find emotional management tools to cope with the challenge and added stress posed by the pandemic situation.

### Practical Implications

Unfortunately, the health crisis had such a heavy impact on our country, with a high number of infections, deaths, and hospitals' lack of resources to care for the ill, that the population's mental health was pushed to the background. As the weeks went by, the public mental health services tried to attend to the population remotely and support children and adults, just as different associations and schools made emergency telephone numbers and psychological care available to citizens. Despite this, our study reflects that only 20.5% of the participants who showed clinical scores on the BSI-18 received psychological or psychiatric treatment. This figure suggests that not everyone who needed help received it. We consider that it is vitally important that in situations of confinement, patients already seen by psychologists and psychiatrists and their families can continue to receive help telematically. In addition, public aid for mental health support during times of crisis should be strengthened to ensure care for the entire

population. It will be important to continue to evaluate telehealth as an ethical and effective tool for providing remote medical and psychological services (Kaplan, 2020).

Bearing in mind the two-way relationship between parents and children's psychological adjustment (Lacomba-Trejo et al., 2020; Prime et al., 2020), health authorities should resource and efforts to support and guide parents on how to manage stress and boost their ability to care for their children in a satisfactory manner. This also challenges institutions and their professionals to learn and innovate, with new ways of guiding families in times of lockdown and post-lockdown.

At the same time, we consider it of special relevance to carry out social policies in favor of family reconciliation. The study shows that teleworking does not guarantee a better family reconciliation in a confinement situation. It has made it possible to maintain jobs and ensure the continuity of economic activity in the context of COVID-19, but it has been a source of stress for adults who, while teleworking, had to take care of their children. The Spanish government and Spanish companies should develop policies to protect the mental health of workers in these new circumstances.

### Limitations and Future Directions

This study has evaluated the emotional, conjugal, and parental state of Spanish parents with young children, bearing in mind a variety of socioeconomic factors within such a critical context as the experience of lockdown. To our knowledge, this is the first study with these objectives conducted in Spain. However, this study also has major limitations. One of them is the design of the study: since it is cross-sectional observational, it only reports on the perception at the time it was performed and does not allow cause-and-effect relationships to be established; nevertheless, it provides valuable information on how the lockdown was experienced when it was the most severe in Spain. Another limitation was that the majority of the participants were women with high educational levels, so it is not a representative sample of the entire Spanish population. These factors were compensated having considered these variables in the analysis. Another limitation is that the questionnaire required a minimum level of digital knowledge, which may have excluded people with a lower educational level or individuals without access to IT devices.

This research is part of a longitudinal study through which we hope to show the change and evolution in the variables studied throughout the lockdown and during the 'new normal'. It is essential to continue researching the impact of lockdowns on families, from the perspective of youths as well, and to evaluate whether the assistance provided by the government and the public health authorities responded to the needs of this population.



## Compliance with Ethical Standards

**Conflict of Interest** The authors declare no competing interests.

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