



ELSEVIER

Contents lists available at [ScienceDirect](https://www.sciencedirect.com)

Child Abuse & Neglect

journal homepage: www.elsevier.com/locate/chiabuneg

The views of children in residential care on the COVID-19 lockdown: Implications for and their well-being and psychosocial intervention

Carme Montserrat, Marta Garcia-Molsosa^{*}, Joan Llosada-Gistau, Rosa Sitges-Figueras

Universitat de Girona, Plaça Sant Domènec 9, 17004 Girona, Spain

ARTICLE INFO

Keywords:

children's views
Residential care
COVID-19 lockdown
Psychosocial intervention
Well-being

ABSTRACT

Background: Recent international research has warned of the impact of the COVID-19 lockdown on vulnerable children. However, little is known regarding the in-care population.

Objective: To find out how children in residential care perceived the influence of the COVID-19 lockdown in their everyday life, relationships and subjective well-being.

Participants and setting: 856 children from 10 to 17 years old ($M_{\text{age}} = 15.5$, males = 71.2%, females = 28.8%) living in residential centres in Catalonia.

Methods: Cross-sectional study. Children responded to an on-line questionnaire administered between June and July 2020. Bivariate analysis and multiple linear regression were used comparing the answers by sex.

Results: Better relationships with caregivers ($\beta = 9.156$, [4.089–14.22], $r^2 = 0.244$, $p < .01$) and having a person of trust ($\beta = 4.588$, [2.041–7.134], $r^2 = 0.244$, $p < .01$) were found to be relevant for children's subjective well-being. For girls, improving their grades ($\beta = 14.86$, [8.560–21.15], $r^2 = 0.234$, $p < .01$) were relevant while boys' subjective well-being was significantly affected by an increase in use of social networks ($\beta = 8.917$, [2.733–15.10], $r^2 = 0.234$, $p < .01$).

Conclusions: A gender perspective is needed to help girls in situations of vulnerability. We should continue to listen to children's opinions, giving them the opportunity to participate in improving the children's home and its immediate environment and ensuring they have access to stable adult role models.

1. Background

On March 14, 2020, a state of emergency was declared by the Spanish Government as a means of managing the health crisis caused by COVID-19. A strict lockdown began for all citizens, regardless of age, placing children under severe restrictions, barring them from going outside or going to school. At the end of April, after a seven-week lockdown, children were allowed to go out briefly once a day in the first step towards scaling down the lockdown, which ended in mid-June.

Recent international studies, albeit limited, have warned that the effects of restrictions introduced to tackle the COVID-19 pandemic have affected children unequally, depending on their social, family and economic situation, and led to an increase in

^{*} Corresponding author.

E-mail addresses: carme.montserrat@udg.edu (C. Montserrat), marta.garcia.molsosa@cmail.cat (M. Garcia-Molsosa).

<https://doi.org/10.1016/j.chiabu.2021.105182>

Received 5 March 2021; Received in revised form 17 May 2021; Accepted 21 June 2021

Available online 26 June 2021

0145-2134/© 2021 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY-NC-ND license

(<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

pre-existing inequalities (Jones et al., 2020; Martínez, Rodríguez, & Velásquez, 2020; Wilke, Howard, & Pop, 2020). In effect, disruptions in daily life, and access to school, health and other services, social distancing measures and being confined at home all pose a greater risk for the most vulnerable child populations, such as children with disabilities, chronic illness or mental health problems, refugee and migrant children and/or children of marginalised ethnic minority groups, children living in rural or isolated areas, children living in social and home environments of extreme poverty, or children in out-of-home care (Burgess et al., 2020; Jones et al., 2020).

The first studies on the impact of the COVID-19 lockdown on children at greater risk can be divided into five main areas: 1) limited access to material resources and decreased family income, and the worsening of situations of extreme child poverty (Wilke, Howard, & Goldman, 2020); 2) increased exposure to either direct or indirect violence (Peet & Teh, 2020; Wilke, Howard, & Goldman, 2020); 3) fewer learning opportunities depending on the social, economic and cultural capital of the family environment and living conditions (Bonal & González, 2020); 4) aggravation of pre-existing mental health problems (Zhang et al., 2020) and increased prevalence of symptoms of depression, anxiety and behaviour problems among children (Romero, López-Romero, Domínguez-Álvarez, Villar, & Gómez-Fraguela, 2020; Xie et al., 2020), and 5) changes in habits: more screen time and less physical activity as well as less healthy eating habits (Francisco et al., 2020; González-Rábago, 2020).

According to Peet and Teh (2020), the stressful factors that most vulnerable families were subjected to, as well as limitations and restrictions on resources and support during the COVID-19 pandemic, may have contributed to an increase in cases entering the care system. Their study, conducted in a city in the United Kingdom, reported a 30% rise in children going into care compared to 2019.

The restrictions introduced as a result of the COVID-19 pandemic have posed an added difficulty for children in care given their home situation and needs, placing them in an especially vulnerable position (CFEFCW, 2020; OECD, 2020). In this regard, one of the most important points to highlight is that contacts with the biological family were interrupted or limited and face-to-face visits replaced by online visits, causing an increase in stress for the children, their biological families and caregivers (Haffejee & Levine, 2020; Neil, Copson, & Sorensen, 2020) and hindering reunification processes or stopping them altogether (Callejas, Davidson, & Ismajli, 2020; Singer & Brodzinsky, 2020). Specifically in Catalonia, where this study took place, face-to-face visits were not resumed until mid-May and were subject to highly restrictive conditions (no overnight stays, only with parents, and accompanied by assigned caregivers or practitioners) (DGAIA, 2020).

Another aspect to highlight is that access to therapeutic and social services was interrupted or limited. These services are essential for managing risky and/or disruptive behaviour, difficult for caregivers to cope with and which may have increased as a result of lockdown (Wong, Ming, Maslow, & Gifford, 2020).

Still unknown are the effects that the COVID-19 lockdown may have regarding other aspects in the lives of children in care such as, socialisation, daily habits and routines and the use of new technologies, school, satisfaction (or dissatisfaction) with the out-of-home placement, and short- or long-term well-being. This study is aimed at filling this gap in knowledge a little more and providing guidelines for enhancing psychosocial interventions.

1.1. Children in residential care under lockdown

Studies focused on this topic are still scarce. Children in residential care, the most prevalent measure of protection in Spain, represent 52% of children in the child protection system in Spain, and 55% in Catalonia (DGAIA, 2020), but the effects of the COVID-19 lockdown on the well-being of children in residential care are not known. On the one hand, a survey conducted by UNICEF Spain (2020) shows how children in care saw their conditions for socialising and social contact worsen, especially when they could not go outside (due to a lack of human resources and the way children's homes are organised and managed), while other children could.

Also, in Spain, a study comparing quality of life and emotional well-being in 459 children in residential and foster care before and after the COVID-19 lockdown revealed few differences and a relative impact, with no difference by type of placement. However, the same study pointed out that other assessment tools adapted to the pandemic situation were required encompassing feelings of fear, loss, or grief (Vallejo-Slocker, Fresneda, & Vallejo, 2020). According to this study, the main concerns of children in care during the lockdown period were related to the health of the people close to them (74%), not being able to see their families and friends (66%), that their lives would not be the same again after the pandemic (53%), and going back to school (40%).

In South Africa, in a very different context, the results of a qualitative study conducted in 32 children in residential care, showed the diversity of personal experiences among children in the same children's home and the complexity of studying the impact of lockdown in this context. The children's emotions ranged from well-being to anger and frustration and they had ambivalent feelings that oscillated between feeling safe in the children's home and, at the same time, being affected by reduced contact with their biological family and concerned about their health (Haffejee & Levine, 2020). Finally, a recent study including representatives from 67 non-governmental organisations in 14 different countries pointed out that, as a result of the COVID-19 outbreak, children in residential care were being returned more hastily to their biological families without receiving appropriate preparation and counselling beforehand, exposing these children to greater risk (Wilke, Howard, & Goldman, 2020).

1.2. Children in residential care: through the girls' eyes

Studies by Authors et al. (2015, 2020) suggested that a lower rate of subjective well-being could be observed among girls in residential care compared to boys. Subjective well-being is a concept that refers to the psychosocial conditions of quality of life, perceptions and satisfaction expressed by the subject. A higher incidence of symptoms of anxiety and depression in girls was also observed in a study by González-García, Lázaro-Visa, Santos, Fernández, and Bravo (2017), and behaviour problems in Andreopoulou,

Skiadopoulos, Drakou, & Gourzis, 2020). These studies reflect a growing interest in analysing these differences and their implications for practice. It was also noted that, in terms of school adjustment (including better academic outcomes), girls performed better than boys (Griffith et al., 2009; Moreno, Garcia-Baamonde, Blazquez, & Guerrero, 2011). And girls were also shown to have better relationships with caregivers in the children's home than boys (Costa, Melim, Tagliabue, Mota, & Matos, 2020), pointing to a greater need in girls to feel 'safe and connected' (Lanctôt, Lemieux, & Mathys, 2016; Sonderman et al., 2021).

That said, to what extent has the pandemic changed or aggravated this situation? According to the study by Vallejo-Slocker et al. (2020) conducted in Spain among a population of children in foster and residential care, it was noted that girls showed a higher incidence of emotional problems and a worse score in the quality of life index, indicating worse functioning of girls during lockdown than boys. The aim of the present study is to delve deeper into the gender perspective, worthy of study among the child population in residential care in the context of a pandemic in which social contacts and attending school were restricted. Accordingly, this article explores how children in residential care perceived the social and mobility measures and restrictions arising from the COVID-19 pandemic in the context of Spain (specifically in Catalonia) with the aim of aiding understanding and contributing to informed decision-making not only at the present time but for similar future crises.

The research questions were: What do children living in residential care think of lockdown? What do they agree on and in what aspects do they differ? How was their subjective well-being? Has it affected boys and girls differently?

2. Objectives

The general objective of this study was twofold: first, its aim was to know how children in residential care aged 10 to 17 years evaluated the lockdown and mobility restrictions. The second objective was to link children's evaluations to their subjective well-being. The research hypothesis was that perceptions and the influence of lockdown on the subjective well-being would be different for boys and girls. These aspects may be key in refocusing professional practice.

Specifically, the aim of this article is:

- To analyse how these children evaluated the information they received about COVID-19 and the influence that lockdown had on their habits, personal space, interpersonal relationships, school, and use of time and new technologies, disaggregating data by sex.
- To analyse the relationship between different variables related to how the children perceived the influence of the COVID-19 measures and their subjective well-being, disaggregating data by sex.
- To make proposals for psychosocial interventions based on the results.

3. Participants

We carried out a cross-sectional study with quantitative data collection. The questionnaire was sent to the total population in residential care in Catalonia (including both residential and reception centres): 4073 children aged 10–17 years old. We received 933 completed questionnaires accounting for a 23% response rate. The minimum age was set at 10 years old to increase the chances of children being able to answer the questionnaire independently.

Table 1 shows that 846 responses were analysed in the end given that questionnaires with more than three of the well-being index items missing were not included nor the ones where children didn't not identify themselves as boys or girls ($n = 11$), since the large difference in size with the other sub-samples (boys and girls) prevented from comparisons. Of the 846 respondents included in the study, 71.2% were boys and 28.8% girls. The majority were in the 14–17 age group (82.7%) and were foreign born (56.9%) ($M_{age} = 15.5$, $SD = 1.97$). This distribution (older children, more boys than girls and more foreign-born children) is very similar to the distribution found in the entire residential care population in this age bracket in Catalonia (DGAIA, 2020), thus making the sample more representative, in spite of the relatively low response rate. It was not possible to know if there were particular reasons for not answering the questionnaire, as it was completely anonymous.

4. Methods

4.1. Instruments and procedure

An ad-hoc, self-reported, anonymous online questionnaire was developed for data collection. It consisted of 51 questions on the respondents' evaluation of the influence of the COVID-19 lockdown and subjective well-being scales based on the questionnaire designed by Authors et al. (2015) adapted to the third wave of the International Survey of Children's Worlds (<https://iscweb.org/the->

Table 1
Study sample characteristics.

| | Sex | | Age | | Place of birth | | Total |
|---|------|-------|-------|-------|----------------|--------------|-------|
| | Boys | Girls | 10–13 | 14–17 | Spain | Not in Spain | |
| n | 602 | 244 | 146 | 700 | 365 | 481 | 846 |
| % | 71.2 | 28.8 | 17.3 | 82.7 | 43.1 | 56.9 | 100 |

Table 2
Differences between boys and girls in evaluating the influence of COVID-19 measures.

| | Boys | | | Girls | | | Total | | p-Value | φ | V |
|---|------|------|----------|-------|------|----------|-------|------|---------|--------|-------|
| | n | % | Residual | n | % | Residual | n | % | | | |
| Habits | | | | | | | | | | | |
| Hours of sleep | | | | | | | | | | | |
| Worse | 78 | 13.0 | -0.2 | 34 | 14.0 | 0.3 | 112 | 13.3 | 0.040 | | 0.088 |
| Same | 296 | 49.5 | 1.0 | 97 | 40.1 | -1.5 | 393 | 46.8 | | | |
| Improved | 224 | 37.5 | -0.9 | 111 | 45.9 | 1.5 | 335 | 39.9 | | | |
| Total | 598 | 100 | | 242 | 100 | | 840 | 100 | | | |
| Eating habits | | | | | | | | | | | |
| Worse | 53 | 8.9 | -1.1 | 33 | 13.8 | 1.7 | 86 | 10.3 | 0.008 | | 0.108 |
| Same | 406 | 68.1 | 1.0 | 137 | 57.1 | -1.5 | 543 | 65.0 | | | |
| Improved | 137 | 23.0 | -0.9 | 70 | 29.2 | 1.4 | 207 | 24.8 | | | |
| Total | 596 | 100 | | 240 | 100 | | 836 | 100 | | | |
| Personal space | | | | | | | | | | | |
| Child's room | | | | | | | | | | | |
| Worse | 46 | 7.7 | -1.2 | 31 | 12.8 | 1.9 | 77 | 9.2 | 0.001 | | 0.129 |
| Same | 463 | 77.7 | 1.0 | 158 | 65.3 | -1.6 | 621 | 74.1 | | | |
| Improved | 87 | 14.6 | -1.3 | 53 | 21.9 | 2.0 | 140 | 16.7 | | | |
| Total | 596 | 100 | | 242 | 100 | | 838 | 100 | | | |
| Study space | | | | | | | | | | | |
| Worse | 34 | 5.7 | -2.0 | 33 | 13.8 | 3.2 | 67 | 8.0 | <0.001 | | 0.141 |
| Same | 417 | 70.0 | 0.8 | 144 | 60.3 | -1.3 | 561 | 67.2 | | | |
| Improved | 145 | 24.3 | -0.2 | 62 | 25.9 | 0.4 | 207 | 24.8 | | | |
| Total | 596 | 100 | | 239 | 100 | | 835 | 100 | | | |
| Relationships | | | | | | | | | | | |
| The relationship with classmates | | | | | | | | | | | |
| Worse | 82 | 14.6 | -1.4 | 53 | 22.6 | 2.1 | 135 | 16.9 | 0.009 | | 0.109 |
| Same | 386 | 68.6 | 0.9 | 137 | 58.3 | -1.4 | 523 | 65.5 | | | |
| Improved | 95 | 16.9 | -0.4 | 45 | 19.1 | 0.6 | 140 | 17.5 | | | |
| Total | 563 | 100 | | 235 | 100 | | 798 | 100 | | | |
| New way of being in contact with my family | | | | | | | | | | | |
| Didn't like it at all | 147 | 26.3 | -2.6 | 109 | 48.4 | 4.1 | 256 | 32.7 | <0.001 | | 0.225 |
| Liked it | 246 | 44.1 | 2.1 | 56 | 24.9 | -3.3 | 302 | 38.6 | | | |
| Unchanged | 165 | 29.6 | 0.4 | 60 | 26.7 | -0.6 | 225 | 28.7 | | | |
| Total | 558 | 100 | | 225 | 100 | | 783 | 100 | | | |
| I felt more alone during lockdown | | | | | | | | | | | |
| Yes | 211 | 36.8 | -1.4 | 117 | 49.6 | 2.2 | 328 | 40.5 | 0.001 | -0.118 | |
| No | 362 | 63.2 | 1.2 | 119 | 50.4 | -1.8 | 481 | 59.5 | | | |
| Total | 573 | 100 | | 236 | 100 | | 809 | 100 | | | |
| When I have a problem, I don't have no one to confide in | | | | | | | | | | | |
| Yes | 191 | 33.4 | -1.6 | 108 | 47.8 | 2.5 | 299 | 37.5 | <0.001 | -0.134 | |
| No | 381 | 66.6 | 1.2 | 118 | 52.2 | -2.0 | 499 | 62.5 | | | |
| Total | 572 | 100 | | 226 | 100 | | 798 | 100 | | | |
| School | | | | | | | | | | | |
| Grades | | | | | | | | | | | |
| Worse | 49 | 8.8 | -0.8 | 29 | 12.6 | 1.3 | 78 | 9.9 | <0.001 | | 0.166 |
| Same | 296 | 52.9 | 1.8 | 80 | 34.6 | -2.8 | 376 | 47.5 | | | |
| Improved | 215 | 38.4 | -1.5 | 122 | 52.8 | 2.4 | 337 | 42.6 | | | |
| Total | 560 | 100 | | 231 | 100 | | 791 | 100 | | | |
| Domestic and leisure activities | | | | | | | | | | | |
| Listening to music | | | | | | | | | | | |
| Less often | 33 | 5.5 | 0.2 | 12 | 5.0 | -0.3 | 45 | 5.4 | <0.001 | | 0.170 |
| No change | 261 | 43.7 | 2.0 | 63 | 26.0 | -3.2 | 324 | 38.6 | | | |
| More often | 303 | 50.8 | -1.7 | 167 | 69.0 | 2.7 | 470 | 56.0 | | | |
| Total | 597 | 100 | | 242 | 100 | | 839 | 100 | | | |
| Cooking | | | | | | | | | | | |
| Less often | 112 | 18.8 | -0.7 | 56 | 23.3 | 1.1 | 168 | 20.1 | <0.001 | | 0.154 |
| No change | 303 | 50.9 | 1.7 | 82 | 34.2 | -2.7 | 385 | 46.1 | | | |
| More often | 180 | 30.3 | -1.5 | 102 | 42.5 | 2.3 | 282 | 33.8 | | | |
| Total | 595 | 100 | | 240 | 100 | | 835 | 100 | | | |
| Doing art | | | | | | | | | | | |
| Less often | 155 | 26.1 | 0.5 | 54 | 22.4 | -0.8 | 209 | 25.1 | <0.001 | | 0.155 |
| No change | 314 | 53.0 | 1.1 | 101 | 41.9 | -1.7 | 415 | 49.8 | | | |
| More often | 124 | 20.9 | -2.1 | 86 | 35.7 | 3.2 | 210 | 25.2 | | | |
| Total | 593 | 100 | | 241 | 100 | | 834 | 100 | | | |
| Playing board games | | | | | | | | | | | |

(continued on next page)

Table 2 (continued)

| | Boys | | | Girls | | | Total | | p-Value | ϕ | V |
|---|------|------|----------|-------|------|----------|-------|------|---------|--------|-------|
| | n | % | Residual | n | % | Residual | n | % | | | |
| Less often | 86 | 14.6 | -0.1 | 37 | 15.2 | 0.2 | 123 | 14.8 | | | |
| No change | 287 | 48.7 | 1.5 | 83 | 34.2 | -2.4 | 370 | 44.5 | | | |
| More often | 216 | 36.7 | -1.5 | 123 | 50.6 | 2.4 | 339 | 40.7 | | | |
| Total | 589 | 100 | | 243 | 100 | | 832 | 100 | <0.001 | | 0.141 |
| ICT | | | | | | | | | | | |
| Playing video games | | | | | | | | | | | |
| Less often | 60 | 10.1 | -2.2 | 52 | 21.7 | 3.5 | 112 | 13.4 | | | |
| No change | 287 | 48.2 | 0.1 | 113 | 47.1 | -0.2 | 400 | 47.9 | | | |
| More often | 248 | 41.7 | 1.2 | 75 | 31.3 | -1.9 | 323 | 38.7 | | | |
| Total | 595 | 100 | | 240 | 100 | | 835 | 100 | <0.001 | | 0.162 |
| Excessive use of social networks | | | | | | | | | | | |
| Yes | 329 | 55.2 | 1.0 | 109 | 44.9 | -1.6 | 438 | 52.2 | | | |
| No | 267 | 44.8 | -1.1 | 134 | 55.1 | 1.7 | 401 | 47.8 | | | |
| Total | 596 | 100 | | 243 | 100 | | 839 | 100 | 0.007 | 0.094 | |
| Accessing websites with inappropriate content for age | | | | | | | | | | | |
| Yes | 123 | 20.9 | 2.5 | 16 | 6.6 | -3.9 | 139 | 16.7 | | | |
| No | 465 | 79.1 | -1.1 | 226 | 93.4 | 1.7 | 691 | 83.3 | | | |
| Total | 588 | 100 | | 242 | 100 | | 830 | 100 | <0.001 | 0.174 | |

Note. p -value of χ^2 test; ϕ = Phi ϕ ; V = Cramer's V .

questionnaire). Subjective well-being questions (11-point scale from 0 to 10) included the single-item Overall Life Satisfaction scale (OLS) and 15 questions on children's satisfaction with different areas of their lives: neighbourhood or area; school; interpersonal relationships; use of time; feeling safe; personal freedom; their own body; material things; what might happen next, and health. These variables were used in previous studies and showed reliable psychometric properties for this study (Authors et al., 2015, 2017).

The questions about lockdown (5-point Likert agreement scale and dichotomous scales) included evaluations on: information received in relation to COVID-19 and the resulting measures of prevention and restrictions; habits; personal space; interpersonal relationships inside and outside the residential home (family, caregivers, friends and teachers); school; use of time, and use of new technologies. These questions were pilot-tested based on children's assessments. The model designed by the researchers was sent to a group of children living in the same children's home ($n = 9$, $M_{\text{age}} = 13.4$, $SD = 1.590$, 4 boys, 5 girls). They completed the questionnaire and then participated in an online focus group in which they gave their assessment of the questionnaire and made some proposals for changes and improvements in relation to the questions on COVID-19. The children's proposals were incorporated in the final version of the questionnaire.

The questionnaire was sent in June 2020 from the child welfare authorities to the directors of the residential care homes so they could be passed on to the children aged 10–17 years old in their care, without making any further distinction. The youngsters were able to respond to the questionnaire in June and July 2020, when the state of emergency in Spain was coming to an end.

4.2. Data analysis

Different bivariate descriptive analyses were performed and three multiple linear regression models were created. Sex was used as a stratifying variable in all tables. The cases with three or less of the well-being index items missing were included in the analysis, imputed by multiple imputation using regression, after checking that they did not modify the SWB means. As mentioned, those with more than three items missing were excluded from the study.

To analyse the COVID-19 variables in the bivariate analyses (Table 2), differences were studied using the Chi-squared test and effect size.

To calculate the well-being index (used in the study as a dependent variable or explanatory variable), the satisfaction variables were grouped with (i) friendships, (ii) student life, (iii) their own body, (iv) what might happen in your life ahead of you, (v) health, (vi) feeling safe, and (vii) use of time. This decision was based on results obtained in previous studies and the importance these things have in the lives of young people in care (Authors et al., 2015, 2020). To validate the subjective well-being scale, a confirmatory factor analysis was performed, showing a good fit ($\chi^2 = 35.967$, p -value = .0003, RMSEA = 0.049, CFI = 0.984).

The mean and standard deviation of the SWB dependent variable were calculated in relation to the independent variables (COVID-19 variables), and ANOVA and the t -test contrast-tests were applied (Table 6). Subsequently, three multiple regression models were constructed for the multivariate analysis and the same procedure was followed in all three. Initially, all variables showing statistical significance in the bivariate analysis were included. Next, variables not showing statistical significance within the model were excluded one by one. The global model (Table 3) was adjusted by sex and age group, while the two subsequent models – one for boys and one for girls – (Tables 4 and 5) were adjusted by age group. All models showed heteroscedasticity, which we compensated for by using robust multiple linear regression. Statistical analyses were performed using STATA-14 software.

Table 3
Global multiple regression model.

| | Coefficient | Robust Std. error | t | P > t | 95% Confidence Interval | |
|--|-------------|-------------------|-------|--------|-------------------------|--------|
| | | | | | Lower | Upper |
| Sex | | | | | | |
| (Boy) | | | | | | |
| Girl | -4.684*** | 1.454 | -3.22 | 0.001 | -7.540 | -1.829 |
| Age | | | | | | |
| (10–13 years) | | | | | | |
| 14–17 years | -3.070* | 1.735 | -1.77 | 0.077 | -6.477 | 0.337 |
| Information on COVID-19 received from caregivers | | | | | | |
| (Yes) | | | | | | |
| No | -6.819*** | 2.469 | -2.76 | 0.006 | -11.67 | -1.972 |
| Change in relationship with caregivers during lockdown | | | | | | |
| (It got worse) | | | | | | |
| It remained the same | 7.846*** | 2.475 | 3.17 | 0.002 | 2.986 | 12.71 |
| It improved | 9.156*** | 2.581 | 3.55 | <0.001 | 4.089 | 14.22 |
| Did the child feel more alone during lockdown? | | | | | | |
| (Yes) | | | | | | |
| No | 4.254*** | 1.239 | 3.43 | 0.001 | 1.822 | 6.687 |
| Change in relationship with classmates during lockdown | | | | | | |
| (It got worse) | | | | | | |
| It remained the same | 1.437 | 1.881 | 0.76 | 0.445 | -2.257 | 5.131 |
| It improved | 7.220*** | 2.328 | 3.10 | 0.002 | 2.650 | 11.79 |
| Children said their grades | | | | | | |
| (It got worse) | | | | | | |
| Stayed the same | 2.954 | 2.375 | 1.24 | 0.214 | -1.709 | 7.618 |
| Improved | 7.542*** | 2.375 | 3.17 | 0.002 | 2.878 | 12.21 |
| Changes in time spent relaxing, talking or playing due to COVID-19 | | | | | | |
| (Less time) | | | | | | |
| It remained the same | 7.105** | 3.237 | 2.19 | 0.029 | 0.749 | 13.46 |
| It increased | 9.779*** | 3.211 | 3.05 | 0.002 | 3.475 | 16.08 |
| Changes in use of social networks | | | | | | |
| (Less use) | | | | | | |
| It remained the same | 2.666 | 2.558 | 1.04 | 0.298 | -2.356 | 7.689 |
| Increase in use | 5.526** | 2.469 | 2.24 | 0.026 | 0.677 | 10.37 |
| Claims to have been bullied via social networks | | | | | | |
| (Yes) | | | | | | |
| No | 6.443*** | 2.448 | 2.63 | 0.009 | 1.636 | 11.25 |
| Has no one to confide in | | | | | | |
| (Yes) | | | | | | |
| No | 4.588*** | 1.297 | 3.54 | <0.001 | 2.041 | 7.134 |
| Constant | 40.26*** | 5.147 | 7.82 | <0.001 | 30.16 | 50.37 |
| Observations | 673 | | | | | |
| R-squared | 0.244 | | | | | |

*** $p < .01$, ** $p < .05$, * $p < .1$.

4.3. Ethical considerations

This research was commissioned, approved and authorised by the Child Welfare Services. The children who answered the questionnaire participated anonymously, voluntarily and did not receive any financial incentive. The research team signed a contract issued by Child Welfare Services covering all aspects of data processing and confidentiality. In terms of ethical approvals, it was considered sufficient the details in the agreement signed with the child protection authorities, specifying the processing of data by the research team relating to access to information, data processing at the headquarters and security measures to ensure information confidentiality and integrity. No access to personal data was provided, not even the postal addresses of the residential centres given that Child Welfare Services were responsible for sending and administering the questionnaire. Case confidentiality was kept during this research and Organic Law 3/2018 on Data Protection and Guarantee of Digital Rights was respected.

5. Results

5.1. Children's evaluations of the influence of COVID-19 measures, according to sex

This section compares how children perceived aspects of lockdown, grouped in seven thematic blocks: information received; habits; personal space; interpersonal relationships inside and outside the children's home; school; use of time, and use of new technologies. Items showing statistically significant differences between sexes are shown (Table 2).

The first point to highlight is that children (with no difference by sex) agreed that the information received about COVID-19 prevention measures and restrictions came from their caregivers. In contrast, they felt they had received very little information

Table 4
Multiple regression model: BOYS.

| | Coefficient | Robust Std. error | t | P > t | 95% confidence interval | |
|--|-------------|-------------------|-------|--------|-------------------------|--------|
| | | | | | Lower | Upper |
| Age | | | | | | |
| (10–13 years) | | | | | | |
| 14–17 years | −1.274 | 2.366 | −0.54 | 0.590 | −5.923 | 3.375 |
| Information on COVID-19 received from caregivers | | | | | | |
| (Yes) | | | | | | |
| No | −6.390* | 3.264 | −1.96 | 0.051 | −12.80 | 0.0243 |
| Change in relationship with caregivers during lockdown | | | | | | |
| (It got worse) | | | | | | |
| It remained the same | 6.513** | 3.083 | 2.11 | 0.035 | 0.454 | 12.57 |
| It improved | 10.41*** | 3.153 | 3.30 | 0.001 | 4.213 | 16.60 |
| Did the child feel more alone during lockdown? Ref | | | | | | |
| (Yes) | | | | | | |
| No | 3.955*** | 1.504 | 2.63 | 0.009 | 1.000 | 6.910 |
| Children said their grades | | | | | | |
| (It got worse) | | | | | | |
| Stayed the same | 0.415 | 3.072 | 0.14 | 0.893 | −5.622 | 6.453 |
| Improved | 5.293* | 3.095 | 1.71 | 0.088 | −0.788 | 11.37 |
| Changes in time spent relaxing, talking or playing due to COVID-19 | | | | | | |
| (Less time) | | | | | | |
| It remained the same | 8.919** | 4.042 | 2.21 | 0.028 | 0.975 | 16.86 |
| It increased | 11.93*** | 4.002 | 2.98 | 0.003 | 4.061 | 19.79 |
| Changes in use of social networks | | | | | | |
| (Less use) | | | | | | |
| It remained the same | 5.035* | 3.033 | 1.66 | 0.098 | −0.924 | 10.99 |
| Increase in use | 8.917*** | 3.147 | 2.83 | 0.005 | 2.733 | 15.10 |
| Changes in time spent playing video games | | | | | | |
| (Less time) | | | | | | |
| It remained the same | 5.272** | 2.670 | 1.97 | 0.049 | 0.0246 | 10.52 |
| It increased | 2.591 | 2.971 | 0.87 | 0.384 | −3.248 | 8.430 |
| Changes in use of social networks to say inappropriate things | | | | | | |
| (Yes) | | | | | | |
| No | 4.122** | 1.800 | 2.29 | 0.022 | 0.585 | 7.658 |
| Has no one to confide in | | | | | | |
| (Yes) | | | | | | |
| No | 3.403** | 1.493 | 2.28 | 0.023 | 0.469 | 6.337 |
| Constant | 38.69*** | 5.928 | 6.53 | <0.001 | 27.04 | 50.34 |
| Observations | 473 | | | | | |
| R-squared | 0.234 | | | | | |

*** $p < .01$.** $p < .05$.* $p < .1$.

from the child welfare teams.

In general, the children participating in the study appreciated the fact that aspects related to hours of sleep and meal times and their personal space (room and study area) had either remained the same during lockdown or improved. However, the girls, with significant differences, were more critical than the boys: a higher percentage of girls thought their hours of sleep had improved (45.9% compared to 37.5% of boys), but in contrast, their eating habits had got worse (13.8% compared to 8.9% boys) as well as the space they had to do homework (13.8% compared to 5.7% of boys). Compared to boys, girls were also more critical of the space in their rooms, which in some cases, they felt had got much worse.

Regarding interpersonal relationships, both boys and girls, with no differences by sex, agreed that the relationship with caregivers had improved, but the relationship with teachers had not changed much. Although overall 65.5% thought that the relationship with classmates had remained the same during lockdown, girls were more pessimistic and 22.6% felt the relationship had got worse during that time. The relationship with the biological family followed a different pattern, with opinions being highly polarised: 38.6% of children said they liked to meet online while 32.7% said they did not. Again, however, the statistical difference was marked by the girls with up to 48.4% who did not like this new form of keeping in touch. Finally, worthy of note is the fact that 40.5% of these young people claimed to have felt lonely during lockdown and 37.5% felt they did not have anyone to confide in when they had a problem, and these percentages were even higher (and significantly) among girls (49.6% and 47.8%, respectively).

The children participating in the study were also divided in their opinions on doing classes online: half of them said they liked it while the other half did not like it all, with no significant differences between boys and girls. In contrast, 42.6% of respondents considered that their grades had improved and very few (9.9%) thought they had got worse. Girls were even more emphatic, marking significant differences with the boys, as 52.8% (compared to 38.4% of boys) claimed their grades had improved.

Boys and girls agreed that helping out at the care home had increased considerably as had having time to relax, talk or play, with no

Table 5
Multiple regression model: GIRLS.

| | Coefficient | Robust Std. error | t | P > t | 95% confidence interval | |
|--|-------------|-------------------|-------|--------|-------------------------|--------|
| | | | | | Lower | Upper |
| Age | | | | | | |
| (10–13 years) | | | | | | |
| 14–17 years | −5.863** | 2.506 | −2.34 | 0.020 | −10.81 | −0.921 |
| Change in relationship with caregivers during lockdown (It got worse) | | | | | | |
| It remained the same | 12.92*** | 4.255 | 3.04 | 0.003 | 4.525 | 21.31 |
| It improved | 8.573* | 4.495 | 1.91 | 0.058 | −0.291 | 17.44 |
| Did the child feel more alone during lockdown? (Yes) | | | | | | |
| No | 4.038* | 2.184 | 1.85 | 0.066 | −0.269 | 8.344 |
| Change in relationship with classmates during lockdown (It got worse) | | | | | | |
| It remained the same | −1.375 | 2.560 | −0.54 | 0.592 | −6.424 | 3.673 |
| It improved | 7.035** | 3.275 | 2.15 | 0.033 | 0.577 | 13.49 |
| Children said their grades (It got worse) | | | | | | |
| Stayed the same | 6.065* | 3.561 | 1.70 | 0.090 | −0.958 | 13.09 |
| Improved | 14.86*** | 3.192 | 4.65 | <0.001 | 8.560 | 21.15 |
| Claims to have been bullied via social networks (Yes) | | | | | | |
| No | 15.15*** | 4.440 | 3.41 | 0.001 | 6.398 | 23.91 |
| Has no one to confide in (Yes) | | | | | | |
| No | 9.438*** | 2.284 | 4.13 | <0.001 | 4.933 | 13.94 |
| Constant | 32.72*** | 6.973 | 4.69 | <0.001 | 18.97 | 46.47 |
| Observations | | | | | | 209 |
| R-squared | 0.352 | | | | | |

*** $p < .01$.

** $p < .0$.

* $p < .1$.

significant differences by sex. In general, both said that certain activities had increased during lockdown, especially listening to music (56%) and playing board games (40.7%), also cooking (33.8%) and to a lesser extent, doing art (25.2%). Broken down by sex, significantly higher percentages of girls thought all these activities had increased (69.9%, 50.6%, 42.5%, and 35.7%, respectively).

Boys and girls agreed that their use of social media had increased. About 10% of participants admitted to having lied or pretended to be someone else online, having received threats and to having been bullied on the social media, but a greater percentage claimed to have said inappropriate things (22%) and to have spent money online (23%). Differences by sex were found in only three aspects: an increase in time spent playing video games in which case the percentage of boys reached 41.7% (compared to 31.3% of girls); excessive use of social networks (55.2% of boys compared to 44.9% of girls), and accessing websites with inappropriate content (20.9% of boys compared to only 6.6% of girls).

5.2. Subjective well-being based on the children's evaluation of the influence of lockdown, according to sex

Based on the findings, three differentiated multiple regression models were made to observe the importance of the sex variable in the influence on subjective well-being (SWB) and the specific variables which affected boys and girls independently. These were: the global model (where the sex variable was included as an independent variable (Table 3); the model for boys (Table 4), and the model for girls (Table 5). Finally, Table 6 provides additional information, showing the SWB index means according to the variables used in the global multiple regression model, by sex.

The global model included 673 cases and was able to explain 24% of the variability of the dependent variable, although causation can not be attributed. Girls, regardless of other variables, had a SWB score 4 points lower than boys of the same age ($p < .01$) and older boys and girls (14–17 years old) had lower levels of SWB than children in the youngest age group (11–14 years old), although we should bear in mind that the variable did not reach statistical significance ($p < .1$).

It was observed that children who had not been given information about COVID-19 by their social educators/caregivers scored, on average, six points lower in SWB than those who had received information ($p < .01$). In the same vein, children who felt their relationship with their caregivers had remained the same or improved showed higher levels of well-being than those who thought the relationship had worsened during that time ($p < .01$).

The children who claimed to have felt more alone during lockdown had lower levels of SWB than those who did not, regardless of sex, age group and the other independent variables included in the model ($p < .01$).

Children who felt their relationship with classmates had improved during lockdown had a 7-point higher SWB score ($p < .01$) and the same occurred with grades. Children who had improved their grades scored 7 points more in SWB than children whose grades had

Table 6
Subjective well-being (SWB) according to the independent variables used in the global multiple regression model, by sex.

| | Sex | | | | | | | | Total | | | |
|--|------|-------|-------|---------|--------|-------|-------|---------|-------|-------|-------|---------|
| | Male | | | | Female | | | | n | Mean | sd | p-Value |
| | n | Mean | sd | p-Value | n | Mean | sd | p-Value | | | | |
| Sex | 602 | 74.12 | 16.59 | | 244 | 70.49 | 18.25 | | 846 | 73.08 | 17.16 | 0.005 |
| Age | | | | | | | | | | | | |
| 10–13 years | 81 | 76.05 | 19.71 | | 65 | 76.80 | 17.30 | | 146 | 76.38 | 18.62 | |
| 14–17 years | 521 | 73.82 | 16.05 | | 179 | 68.20 | 18.09 | | 700 | 72.38 | 16.77 | |
| Total | 602 | 74.12 | 16.59 | 0.261 | 244 | 70.49 | 18.25 | 0.001 | 846 | 73.08 | 17.16 | 0.010 |
| Information on COVID-19 received from caregivers | | | | | | | | | | | | |
| Yes | 526 | 74.89 | 15.86 | | 216 | 71.68 | 17.31 | | 742 | 73.96 | 16.35 | |
| No | 50 | 65.08 | 22.17 | | 24 | 62.26 | 23.16 | | 74 | 64.17 | 22.38 | |
| Total | 576 | 74.04 | 16.71 | <0.001 | 240 | 70.74 | 18.15 | 0.016 | 816 | 73.07 | 17.20 | <0.001 |
| Change in relationship with caregivers during lockdown | | | | | | | | | | | | |
| It got worse | 50 | 63.71 | 21.65 | | 22 | 61.82 | 18.95 | | 72 | 63.13 | 20.75 | |
| It remained the same | 325 | 72.34 | 14.84 | | 129 | 71.22 | 17.59 | | 454 | 72.02 | 15.66 | |
| It improved | 224 | 79.00 | 16.24 | | 92 | 71.29 | 18.61 | | 316 | 76.76 | 17.29 | |
| Total | 599 | 74.11 | 16.61 | <0.001 | 243 | 70.40 | 18.23 | 0.068 | 842 | 73.04 | 17.16 | <0.001 |
| Did the child feel more alone during lockdown? | | | | | | | | | | | | |
| Yes | 211 | 71.05 | 19.13 | | 117 | 67.17 | 19.06 | | 328 | 69.67 | 19.16 | |
| No | 362 | 76.08 | 14.11 | | 119 | 73.21 | 16.97 | | 481 | 75.37 | 14.90 | |
| Total | 573 | 74.23 | 16.30 | <0.001 | 236 | 70.22 | 18.25 | 0.011 | 809 | 73.06 | 16.98 | <0.001 |
| Change in relationship with classmates during lockdown | | | | | | | | | | | | |
| It got worse | 82 | 68.29 | 22.19 | | 53 | 66.31 | 16.89 | | 135 | 67.51 | 20.23 | |
| It remained the same | 386 | 74.30 | 15.43 | | 137 | 69.46 | 19.24 | | 523 | 73.04 | 16.63 | |
| It improved | 95 | 81.32 | 14.72 | | 45 | 78.84 | 15.19 | | 140 | 80.52 | 14.86 | |
| Total | 563 | 74.61 | 16.85 | <0.001 | 235 | 70.55 | 18.44 | 0.002 | 798 | 73.41 | 17.42 | <0.001 |
| Children said their grades | | | | | | | | | | | | |
| Got worse | 49 | 71.34 | 18.53 | | 29 | 58.77 | 18.34 | | 78 | 66.67 | 19.33 | |
| Stayed the same | 296 | 72.81 | 15.94 | | 80 | 66.81 | 20.51 | | 376 | 71.53 | 17.16 | |
| Improved | 215 | 77.53 | 17.18 | | 122 | 75.96 | 14.71 | | 337 | 76.96 | 16.32 | |
| Total | 560 | 74.49 | 16.81 | 0.003 | 231 | 70.64 | 18.36 | <0.001 | 791 | 73.37 | 17.35 | <0.001 |
| Changes in time spent relaxing, talking or playing due to COVID-19 | | | | | | | | | | | | |
| Less time | 32 | 57.27 | 22.29 | | 16 | 65.87 | 20.53 | | 48 | 60.14 | 21.88 | |
| It remained the same | 267 | 72.18 | 16.20 | | 90 | 68.69 | 20.79 | | 357 | 71.30 | 17.51 | |
| It increased | 298 | 77.86 | 14.66 | | 132 | 72.42 | 15.92 | | 430 | 76.19 | 15.24 | |
| Total | 597 | 74.22 | 16.55 | <0.001 | 238 | 70.57 | 18.27 | 0.187 | 835 | 73.18 | 17.13 | <0.001 |
| Changes in use of social networks | | | | | | | | | | | | |
| Less use | 48 | 63.39 | 22.22 | | 25 | 69.27 | 19.73 | | 73 | 65.41 | 21.45 | |
| It remained the same | 228 | 71.96 | 15.70 | | 89 | 69.55 | 20.22 | | 317 | 71.28 | 17.09 | |
| Increase in use | 319 | 77.28 | 15.39 | | 126 | 71.03 | 16.55 | | 445 | 75.51 | 15.96 | |
| Total | 595 | 74.12 | 16.63 | <0.001 | 240 | 70.30 | 18.26 | 0.808 | 835 | 73.02 | 17.19 | <0.001 |
| Claims to have been bullied via social networks | | | | | | | | | | | | |
| Yes | 61 | 66.83 | 24.36 | | 20 | 58.79 | 22.74 | | 81 | 64.85 | 24.08 | |
| No | 533 | 75.02 | 15.31 | | 222 | 71.35 | 17.45 | | 755 | 73.94 | 16.05 | |
| Total | 594 | 74.18 | 16.63 | <0.001 | 242 | 70.31 | 18.22 | 0.003 | 836 | 73.06 | 17.18 | <0.001 |
| Has no one to confide in | | | | | | | | | | | | |
| Yes | 191 | 71.03 | 18.00 | | 108 | 63.89 | 18.71 | | 299 | 68.45 | 18.55 | |
| No | 381 | 75.68 | 15.97 | | 118 | 76.35 | 16.58 | | 499 | 75.84 | 16.10 | |
| Total | 572 | 74.13 | 16.80 | 0.002 | 226 | 70.40 | 18.67 | <0.001 | 798 | 73.07 | 17.42 | <0.001 |

Note. *p*-value of the ANOVA Test and *t* Test.

got worse ($p < .01$).

On the other hand, boys and girls who felt that lockdown had served to have more time to relax, talk or play, generally had higher SWB scores (7.1 and 9.8 punts, respectively) than those who felt they had less time to do these things ($p < .05$ and $p < .01$, respectively).

Children who had used social media more during lockdown had higher levels of SWB than those who felt they had used them less ($p < .01$).

Another important variable in the model was whether or not they had been bullied during lockdown. Children who had been bullied had worse levels of well-being, regardless of sex, age and the other variables ($p < .01$).

Finally, it was observed that children who shared their concerns with others had a higher level of SWB than those who could not

confide in anyone ($p < .01$).

The boy-specific regression model had an explanatory power of 23% of SWB variability, although causation can not be attributed (Table 4). Although the model was adjusted according to age group, age was not significant. The most relevant variables with a positive influence on boys' SWB were: the relationship with caregivers had not worsened ($p < .01$ compared to whether it had improved); not feeling alone during lockdown ($p < .01$); having had the same or more time to relax, talk or play ($p < .01$ compared to having less time), or having used social networks more ($p < .01$ compared to having used them less).

Other aspects to highlight, although less relevant, were, on the one hand, related to video games. It was observed that boys who had the same time to play video games presented higher SWB scores than those who played less during lockdown ($p < .05$). On the other, boys who shared their concerns with other people had a higher SWB score regardless of the rest of the variables in the model ($p < .05$).

The girl-specific regression model included fewer independent variables, but at the same time, had greater explanatory power, although causation can not be attributed, (35.2%) than the global model (24.4%) and the boy-specific model (23.4%). This means that the independent variables in this model had a greater influence on girls' well-being than the independent variables included in the boys' model (Table 5).

Coinciding with the model for boys was the relationship with caregivers during lockdown variable. Girls who felt the relationship had worsened had a much lower SWB score (12.8 points less) than those who felt it had remained the same. Besides, like boys, girls who could explain their problems to others had significantly higher SWB scores than those who could not ($p < .01$).

In contrast, unlike the boy-specific model, girls' age affected SWB regardless of the other variables. Thus, the SWB score for older girls was 5.8 points lower than that of younger girls. Similarly, girls who felt alone during lockdown had worse SWB scores, although this variable did not reach statistical significance ($p < .1$).

Finally, it should be highlighted that a series of school-related variables in the girls' model did not reach statistical significance in the boys' model. First, an improvement, as opposed to a worsening, of the relationship with classmates presented differences in SWB scores ($p < .01$). Second, girls who had not been bullied during lockdown had, on average, a 15-point higher SWB score than those who had been victims of bullying ($p < .01$). Finally, improving their grades also had a positive effect on SWB scores (14.8 points more on average than those whose grades had got worse – $p < .01$).

To complement the information related to the multiple regression models, Table 6 shows the means of SWB according to the variables included in the global multiple regression model presenting the statistical differences in each sex sub-sample.

6. Discussion

Asking people, in this case children, for their views on a phenomenon that affects them directly, such as the COVID-19 lockdown measures, forms part of the child-centred approach (Lundy & McEvoy, 2012). That is, when we seek to introduce changes or improvements, they should be based mainly on evaluations made by the children themselves, avoiding the adult-centred approach that so often predominates when working with children (Casas et al., 2013). Thus, the following aspects in particular, based on the children's evaluations, will be discussed: the important role the children assigned to their caregivers in the children's home during the pandemic, which contrasted with the scant recognition they gave to the child welfare teams; gender differences in evaluating interpersonal relationships (school, family and friends); how they evaluated the increase in activities (especially leisure activities) carried out in the children's home, and the use of space there, and the growing use of social networks with some aspects of concern.

Regarding the block of interpersonal relationships, boys and girls agreed that the relationship with caregivers had improved. This is a key issue given the importance it has in their lives (Authors et al., 2020; Costa et al., 2020) and especially because it hints at the quality of professional interventions carried out in adverse times. Caregivers spent many hours alongside the children in a closed space, mediating in conflicts, but also very probably building more direct relationships with the youngsters, and it is likely that this is what the children valued – that someone had kept them informed, protected them and spent time with them. It is a surprising finding compared to other research in this field that showed an increase of foster families acute stress and placement disruptions during the Covid-19 lockdown (Peet & Teh, 2020; Wong et al., 2020; Xu, Wu, Jedwab, & Levkoff, 2020). A possible explanation could be that caregivers are more prepared than foster parents to deal with children behavioural challenges in crisis times. Another hypothesis could be that the sense of being part of the same community facing an adversity (Covid-19 pandemic) could have reinforced the bounds and confidence between children and caregivers: caregivers were the ones who were next to them during all the lockdown and children felt protected, supported and accompanied. Finally, it could be possible that during the pandemic the stability of the professional staff in residential centres in Spain increased due to mobility restrictions, when normally, as reported in other studies, caregivers' turnover is very high (Authors, 2019).

However, differences by sex were observed regarding other relationships, in which girls were generally more critical or less optimistic. They were more affected by not seeing their classmates, they thought that some relationships had got worse during lockdown and, in particular, half of them reported not liking online interactions. In general, girls said they felt more alone compared to boys. The available scientific literature points to the importance that girls give to the area of relationships (Authors et al., 2020; Lanctôt et al., 2016) and we need to keep this mind and think of intervention strategies that address this aspect, especially in difficult times.

Particularly noteworthy with regard to school is the fact that almost half the children felt their grades had improved, and even more significantly among girls, who have traditionally been shown to have greater school adjustment (Griffith et al., 2009; Moreno et al., 2011). This is no minor matter bearing in mind not only the educational inequalities known to affect this population but also the negative perception that society has of them, and they have of themselves (Authors, 2019; Authors et al., 2021). It might have been because the children were not under so much pressure during lockdown, had more time to study and received more support from their caregivers, so were better able to regulate their pace of learning. Yet, perhaps they also benefitted from less demanding school

assessments during lockdown. We also need to learn from this and formulate proposals.

On the subject of sleep, eating habits and activities, in general the study participants thought that activities in the children's home (especially leisure activities) had increased during lockdown. Having had more time to relax, talk or play, listen to music, play board games, cook and do art was highly valued, and even more so by girls. The use of time to play and relax remains a little explored topic and in light of these results is worthy of more attention (Author et al., 2019).

Finally, there was an increase in the use of the social networks and in time spent playing video games. This was valued positively but, at the same time, certain points have arisen that should be focused on, especially regarding boys, who acknowledged excessive computer use and accessing websites with inappropriate content. An increase in cyberbullying and spending money online was also reported. These aspects have been addressed in part in Francisco et al. (2020) and González-Rábago (2020).

The issue of relationships with the biological family also warrants some reflection. Views were polarised between those who said they liked to interact with their family online and those who did not like it at all. Nonetheless, situations were very diverse ranging from regular, satisfactory family visits for some to supervised, very tense visits for others. This brings us again to the importance of the participation of children in decision-making on an issue that affects them so directly (CFECFW, 2020; Haffejee & Levine, 2020; Neil et al., 2020), as opposed to presupposing what children need from an adult's perspective.

As for the link between these evaluations and children's subjective well-being, the first point to highlight is that two aspects were observed in boys and girls alike: a significantly higher level of subjective well-being was shown in children who claimed that the relationship with caregivers at the children's home had improved, and a significantly lower level was found among those who reported having no one to explain their problems to. Ultimately, these two aspects remit to a central issue: feeling cared for or supported in one's life path, and therefore it is essential that caregivers can provide a positive parenting model.

However, one relevant point was that girls in general had lower subjective well-being scores than boys, in line with the study by Authors et al. (2015, 2020). Moreover, older girls (14–17 years old) had significantly lower SWB. The relationship with classmates, bullying and school grades affected girls much more than boys. These aspects may be analysed separately, but were also interrelated, especially since the older the girls were, the more importance they gave to being accepted by their group of friends and their academic results. In contrast, boys had significantly higher SWB scores when they claimed to have been able to relax, talk or play and their use of the social networks and video games increased. It would appear that at this age personal relationships are more important for girls, while being able to enjoy fun aspects are more relevant for boys. This pandemic has put everything to the test.

This study is a step towards knowledge, but it is not without limitations. First, the research design, cross-sectional, did not enable causal relationships to be established among lockdown variables and subjective well-being. Besides, it did not include other perspectives different from children (such as caregivers'), leaving these aspects for future research. Second, the response rate was relatively low and might have influenced the unbiasedness of results, although it is worth to empathise that it was high in relation to other samples of children in residential care and its characteristics were similar to the entire residential care population in Spain at this age. Third, analysing by sex did not allow us to capture the diversity within each group. Moreover, although the first analyses revealed few differences according to type of children's home or child's country of origin, these aspects should be addressed in greater depth. On the other hand, we also need to look at the future impact of this health and economic crisis on the quality and availability of children's homes, staff changes, layoffs, etc. Furthermore, although children who self-identify as gender or sex minority were allowed to choose an alternative gender identity in the questionnaire, they could not be considered for statistical analysis due to its low percentage, which opens a great methodological challenge for the future in terms of gender perspective.

6.1. Proposals for psychosocial interventions

This study entailed gathering ample and extensive information on how children in residential care experienced the COVID-19 lockdown. The sample was large enabling data disaggregation by sex. Many are the results and conclusions derived from the data, but we will highlight some that may be relevant in professional interventions and child policy decision-making:

- The work of residential caregivers must be highlighted, valued very positively by children, leading to two basic recommendations: more support and training for these workers is needed, as well as more opportunities to learn and share best practices. In contrast, child welfare teams need to bring their interventions closer to the lives of children in care.
- Children must be allowed to participate in decision-making regarding birth family visits, on how and when, whether safety measures need to be adopted to see their family if needed, or permitting them to continue having online family visits if they feel more protected and more in control of the situation in this way.
- School must be maintained as a priority in these children's lives by dedicating all the necessary resources: increasing support for school work, study spaces and dedication to school in children's homes, ensuring daily attendance so as not to lose the pace of learning, and taking care of their relationship with classmates.
- The importance of being able to offer leisure activities and play areas.
- Guaranteeing access to technologies, but with educational support.

In short, a gender perspective is needed to help girls in situations of vulnerability. We should continue to listen to children's opinions, empowering them in decision-making on how they manage their time and their lives, giving them the opportunity to participate in improving the children's home and its immediate environment and ensuring they have access to stable adult role models.

Funding

This work was supported by the Direcció General d'Atenció a la Infància i l'Adolescència (Generalitat de Catalunya) [General Direction for the Attention of Children and Adolescence, Government of Catalonia].

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Declaration of interest statement

The authors have no competing interests to declare.

Acknowledgments

Thanks to the young people who have participated in the study and to Diane Harper for editing the English.

References

- Andreopoulou, O., Skiadopoulos, S., Drakou, Z., & Gourzis, P. (2020). Behavioural and emotional profile of children in residential care in Greece. *Psychiatrike= Psychiatriki*, 31(4), 321–331. <https://doi.org/10.22365/jpsych.2020.314.321>
- Author, et al. (2019). *Details omitted for double-blind reviewing*.
- Authors. (2019). *Details omitted for double-blind reviewing*.
- Authors, et al. (2015). *Details omitted for double-blind reviewing*.
- Authors, et al. (2017). *Details omitted for double-blind reviewing*.
- Authors, et al. (2020). *Details omitted for double-blind reviewing*.
- Authors, et al. (2021). *Details Omitted for Double-blind Reviewing*.
- Bonal, X., & González, S. (2020). The impact of lockdown on the learning gap: Family and school divisions in times of crisis. *International Review of Education*, 1–21. <https://doi.org/10.1007/s11159-020-09860-z>
- Burgess, M., Sulaiman, M., Arlini, S. M., Qaiser, M. H., Thyagarajah, S., Dulcieu, N., ... Mendoza, P. (2020). *The hidden impact of COVID-19 on children. A global research series. Save the Children*. <https://resourcecentre.savethechildren.net/library/hidden-impact-covid-19-children-global-research-series>.
- Callejas, L. M., Davidson, A., & Ismajli, F. (2020). Rapid ethnographic assessment of pandemic restrictions in child welfare: Lessons from parent and provider experiences. *Human*, 79(4).
- Casas, F., González, M., Navarro, D., & Aligué, M. (2013). Children as advisers of their researchers: Assuming a different status for children. *Child Indicators Research*, 6(2), 193–212. <https://doi.org/10.1007/s12187-012-9168-0>
- CfECFW. (2020). *Responding to the needs of children and families. Impact report*. Centre for Excellence in Child and Family Welfare. <https://www.cfecfw.asn.au/wp-content/uploads/2020/07/COVID-19-Impact-Report-FINAL-1.pdf>.
- Costa, M., Melim, B., Tagliabue, S., Mota, C. P., & Matos, P. M. (2020). Predictors of the quality of the relationship with caregivers in residential care. *Children and Youth Services Review*, 108. <https://doi.org/10.1016/j.chilyouth.2019.104579>
- DGAIA. (2020). Informe estadístic mensual. Direcció General d'Atenció a la Infància i l'Adolescència (DGAIA) (Agost 2020). Direcció General d'Atenció a la Infància i l'Adolescència) https://treballiafersocials.gencat.cat/web/.content/03ambits_tematicos/07infanciaiadolescencia/dades_sistema_proteccio/2020_08_informe_DGAIA.pdf.
- Francisco, R., Pedro, M., Delvecchio, E., Espada, J. P., Morales, A., Mazzeschi, C., & Orgilés, M. (2020). Psychological symptoms and behavioral changes in children and adolescents during the early phase of COVID-19 quarantine in three European countries. *Frontiers in Psychiatry*, 11, 13–29. <https://doi.org/10.3389/fpsy.2020.570164>
- González-García, C., Lázaro-Visa, S., Santos, I., Fernández, J., & Bravo, A. (2017). School functioning of a particularly vulnerable group: Children and young people in residential child care. *Frontiers in Psychology*, 8. <https://doi.org/10.3389/fpsyg.2017.01116>
- González-Rábago, Y. (2020). COVID-19 Y SALUD INFANTIL: EL CONFINAMIENTO Y SU IMPACTO SEGÚN PROFESIONALES DE LA INFANCIA. *Revista Española Salud Pública*, 94(27), 27 (doi:202007064).
- Griffith, A. K., Trout, A. L., Chmelka, M. B., Farmer, E. M. Z., Epstein, M. H., Reid, R., ... Orduna, D. (2009). Youth departing from residential care: A gender comparison. *Journal of Child and Family Studies*, 18(1), 31–38. <https://doi.org/10.1007/s10826-008-9204-3>
- Haffejee, S., & Levine, D. T. (2020). "When will I be free?": Lessons from COVID-19 for child protection in South Africa. *Child Abuse & Neglect*, 110. <https://doi.org/10.1016/j.chiabu.2020.104715>
- Jones, B., Woolfenden, S., Pengilly, S., Breen, C., Cohn, R., Biviano, L., Johns, A., Worth, A., Lamb, R., & Lingam, R. (2020). COVID-19 pandemic: The impact on vulnerable children and young people in Australia. *Journal of Paediatrics and Child Health*, 56, 1851–1855. <https://doi.org/10.1111/jpc.15169>
- Lancôt, N., Lemieux, A., & Mathys, C. (2016). The value of a safe, connected social climate for adolescent girls in residential care. *Residential Treatment for Children & Youth*, 33(3–4), 247–269. <https://doi.org/10.1080/0886571X.2016.1207218>
- Lundy, L., & McEvoy, L. (2012). Children's rights and research processes: Assisting children to (in) formed views. *Childhood*, 19(1), 129–144. <https://doi.org/10.1177/0907568211409078>
- Martínez, M., Rodríguez, I., & Velásquez, G. (2020). Infancia Confinada: ¿Cómo viven la situación de confinamiento niñas, niños y adolescentes?. In *Infancia Confinada y Enclave de Evaluación*.
- Moreno, J. M., Garcia-Baamonde, M. E., Blazquez, M., & Guerrero, E. (2011). An analysis of how children adapt to residential care. *Children and Youth Services Review*, 33(10), 1981–1988. <https://doi.org/10.1016/j.chilyouth.2011.05.024>
- Neil, E., Copson, R., & Sorensen, P. (2020). *Contact during lockdown: How are children and their birth families keeping in touch?: Main report*. Nuffield Family Justice Observatory.
- OECD. (2020). *Combating COVID-19's effect on children (tackling coronavirus (COVID-19): Contributing to global effort)* (p. 40). Organisation for Economic Co-operation and Development (OECD). https://read.oecd-ilibrary.org/view/?ref=132_132643-m91j2scsyh&title=Combating-COVID-19-s-effect-on-children.
- Peet, H., & Teh, C. (2020). The impact of the Covid-19 pandemic on children who become looked after in Derby City. *Adoption & Fostering*, 44(4), 426–432. <https://doi.org/10.1177/0308575920978902>
- Romero, E., López-Romero, L., Domínguez-Álvarez, B., Villar, P., & Gómez-Fraguela, J. A. (2020). Testing the effects of COVID-19 confinement in Spanish children: The role of parents' distress, emotional problems and specific parenting. *International Journal of Environmental Research and Public Health*, 17(19). <https://doi.org/10.3390/ijerph17196975>

- Singer, J., & Brodzinsky, D. (2020). Virtual parent-child visitation in support of family reunification in the time of COVID-19. *Developmental Child Welfare*, 2(3), 153–171. <https://doi.org/10.1177/2516103220960154>
- Sonderman, J., Van der Helm, G. H. P., Kuiper, C. H. Z., Roest, J. J., Van de Mheen, D., & Stams, G. (2021). Differences between boys and girls in perceived group climate in residential youth care. *Children and Youth Services Review*, 120. <https://doi.org/10.1016/j.childyouth.2020.105628>
- UNICEF-España. (2020). *Impacto de la crisis por covid-19 sobre los niños y niñas más vulnerables: Reimaginar la reconstrucción en clave de derechos de la infancia*. https://www.unicef.es/sites/unicef.es/files/recursos/informe-infancia-covid/covid19-infancia_vulnerable_unicef.pdf.
- Vallejo-Slocker, L., Fresneda, J., & Vallejo, M. A. (2020). Psychological wellbeing of vulnerable children during the COVID-19 pandemic. *Psicothema*, 32(4), 501–507. <https://doi.org/10.7334/psicothema2020.218>
- Wilke, N. G., Howard, A. H., & Goldman, P. (2020). Rapid return of children in residential care to family as a result of COVID-19: Scope, challenges, and recommendations. *Child Abuse & Neglect*, 110, Article 104712. <https://doi.org/10.1016/j.chiabu.2020.104712>
- Wilke, N. G., Howard, A. H., & Pop, D. (2020). Data-informed recommendations for services providers working with vulnerable children and families during the COVID-19 pandemic. *Child Abuse & Neglect*, Article 104642. <https://doi.org/10.1016/j.chiabu.2020.104642>
- Wong, C. A., Ming, D., Maslow, G., & Gifford, E. J. (2020). Mitigating the impacts of the COVID-19 pandemic response on at-risk children. *Pediatrics*, 145(4), Article e20200973. <https://doi.org/10.1542/peds.2020-0973>
- Xie, X., Xue, Q., Zhou, Y., Zhu, K., Liu, Q., Zhang, J., & Song, R. (2020). Mental health status among children in home confinement during the coronavirus disease 2019 outbreak in Hubei Province, China. *JAMA Pediatrics*, 174(9), 898–900. <https://doi.org/10.1001/jamapediatrics.2020.1619>
- Xu, Y., Wu, Q., Jedwab, M., & Levkoff, S. E. (2020). Understanding the relationships between parenting stress and mental health with grandparent kinship caregivers' risky parenting behaviors in the time of COVID-19. *Journal of Family Violence*, 1–13. <https://doi-org.biblioremot.uvic.cat/10.1007/s10896-020-00228-3>.
- Zhang, J., Shuai, L., Yu, H., Wang, Z., Qiu, M., Lu, L., Cao, X., Xia, W., Wang, Y., & Chen, R. (2020). Acute stress, behavioural symptoms and mood states among school-age children with attention-deficit/hyperactive disorder during the COVID-19 outbreak. *Asian Journal of Psychiatry*, 51. <https://doi.org/10.1016/j.ajp.2020.102077>