



HAL
open science

COVID-19 and parental burnout: Parents locked down but not more exhausted

Sarah Le Vigouroux, Astrid Lebert, Jaqueline Wendland, Emilie Boujut, Céline Scola, Géraldine Dorard

► **To cite this version:**

Sarah Le Vigouroux, Astrid Lebert, Jaqueline Wendland, Emilie Boujut, Céline Scola, et al.. COVID-19 and parental burnout: Parents locked down but not more exhausted. *Journal of Family Issues*, 2022, 43 (7), pp.1705-1720. 10.1177/0192513X211030038 . hal-03265706

HAL Id: hal-03265706

<https://hal.science/hal-03265706>

Submitted on 21 Jun 2021

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

COVID-19 and parental burnout: Parents locked down but not more exhausted

Authors : Sarah Le Vigouroux^{1*}; Astrid Lebert², Jaqueline Wendland², Emilie Boujut², Céline Scola³, & Géraldine Dorard².

1 UNIV. NIMES, APSY-V, F-30021 Nîmes Cedex 1, France.

2 Université de Paris, LPPS, F-92100 Boulogne-Billancourt, France.

3 Aix Marseille Univ ; PSYCLE, Aix en Provence, France

*Corresponding author: Université de Nîmes, Rue du Docteur Georges Salan CS 13019 ;
30021 NIMES Cedex 1, France. E-mail address: sarah.le_vigouroux_nicolas@unimes.fr (S.
LE VIGOUROUX)

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding Statement: This research received no specific grant from any funding agency, commercial or not-for-profit sectors.

Acknowledgements

We would like to warmly thank Moïra Mikolajczak and Isabelle Roskam from the *Université Catholique de Louvain* (Belgium) for inviting us to participate in the IIPB, as well as Ruby A. S. Hall and Hedwig J. A. van Bakel of the University of Tilburg (Netherlands) for inviting us to participate in the Covid-19 IIPB.

Abstract: Lockdowns put in place in response to the COVID-19 health crisis have changed daily functioning for families and potentially the emotional experience of individuals in their parenting role. Our study aimed to highlight the importance of the environmental consequences associated with lockdowns on parental burnout. We compared data on parental burnout levels from two French samples: the first collected in 2018 (N=1332) and the second collected during the last month of lockdown (N=522). Our results show that parents included during the lockdown period reported significantly, but slightly, higher saturation (a dimension of the parental burnout construct) than parents included two years earlier. However, the number of children per age group, maintaining employment and having to provide schooling at home are not variables that explain differences in the level of parental burnout between our two samples. Our results are discussed with regard to the risk factors identified and the French context.

Key words: exhaustion, parenting, lockdown, coronavirus, French, saturation

Introduction

In France (as well as many other countries), on March 14th, 2020, the government declared the implementation of the first general population lockdown, which took place from March 16th to May 10th, in an attempt to reduce the spread of COVID-19 in the population. This restrictive measure resulted in the closure of all collective care facilities for children and/or adolescents (day-care centers, schools, colleges, high schools), except for the children of essential workers (e.g., health professionals or police officers). In addition, the lockdown did not allow families to use outside help for child care (e.g., babysitters and grandparents for childcare). In their meta-analysis of 24 studies concerning the psychological consequences of lockdown situations associated with epidemics prior to that of COVID-19, Brooks et al. (2020) highlighted that lockdown induced an increase in activated negative affect (such as anger, irritation and frustration) and mood disorders (such as anxiety and depressive disorders). Specifically, the psychological distress resulting from lockdown situations depends on the imposition of restrictive measures rather than on the indefinite term of the lockdown, insufficient or inadequate information, or financial loss.

At the family level, these restrictive measures were, therefore, accompanied by a retreat into the nuclear family, which resulted in a significant increase in the amount of time parents and children spent together and a reduction in living space in the home for more than two months. More than the simple management of children, for families whose children were in school, part of the time spent together had to be devoted to home schooling, requiring parents to take on the role of their child's teacher. These particular living conditions may have contributed to an increase in parental exhaustion due to the multiplication of tasks (e.g., number of meals to prepare, finding occupations at home for younger children, home schooling) along with the inability to use external environmental resources (e.g., outside help to care for children) and the reduction in internal resources (e.g., time for themselves). In other words, the context

of the lockdown increased parental demands while reducing the usual resources on which parents could rely in their parenting role.

Parental burnout is consequence of the chronicization of parental stress and is theoretically composed of four subdimensions: emotional exhaustion, saturation, contrast and emotional distancing (Roskam et al., 2018). Emotional exhaustion refers to the parent's lack of energy and fatigue. Saturation refers to the parent's lack of pleasure in being with their children. Contrast refers to the parent's feeling that he or she no longer recognizes himself or herself as a parent. Emotional distancing describes the parent's emotional disinvestment in their children. Mikolajczak and Roskam (2018) explain that a significant imbalance between resources and demands associated with the parental role, in favor of the latter, is likely to lead to the emergence of parental burnout syndrome. The theory of the balance between risks and resources (BR²) emphasizes that parents who have many demands on their parenting and who have few environmental and dispositional resources are exhausted. This theory is based on data from studies on the risk and protective factors for parental burnout available in the current scientific literature (Mikolajczak & Roskam, 2018).

With regard to environmental factors, parents who stay at home, work part-time, have a sick or disabled child or a high number of children at home were identified as being at greater risk of developing parental burnout (Gérain & Zech, 2019; Kawamoto et al., 2018; Lebert-Charron et al., 2018; Sánchez-Rodríguez et al., 2018; Sorkkila & Aunola, 2020). Conversely, in some countries, such as France, England, Belgium or United States, living without a coparent or being an older parent may protect from parental burnout (Gérain & Zech, 2018; Lebert-Charron et al., 2018). With regard to the dispositional factors investigated in relation to parental burnout, various studies have highlighted that neuroticism, meticulousness, avoidant attachment and restrictions in one's parental role are positively associated with parental burnout (Le Vigouroux et al., 2017; Le Vigouroux & Scola, 2018; Mikolajczak et al., 2017). Some

dispositional factors may also be protective factors for parental burnout, such as emotional intelligence or being pleasant, conscientious, extroverted or emotionally stable (Le Vigouroux et al., 2017; Le Vigouroux & Scola, 2018; Mikolajczak et al., 2017). Furthermore, a study by Mikolajczak et al. (2018) indicated that factors related to the parent's personality explained seven times more of the variance in parental burnout than sociodemographic factors (22% vs. 3%). This result is corroborated by the study of BR²'s theory showing that parental, marital and personal factors explain more variance in the development of parental burnout than sociodemographic and circumstantial factors (Mikolajczak & Roskam, 2018).

Griffith (2020) has argued that lockdown has resulted in significant changes in daily life, exposing parents to more demographic risk factors. Based on the BR² theory, she hypothesizes that lockdown would lead to a mismatch between parents' perceived demands and expectations of their children's education and the availability of resources to meet those demands. Thus, confinement would modify the equilibrium of the balance, by increasing the contextual demands and would thus lead to an increased risk of parental burnout in locked-down parents. This hypothesis of an increase in parental burnout during confinement need to be explored given several potential consequences for the parent, spouse and children. Indeed, at the individual level, there may be avoidance behaviors, particularly addiction, sleeping difficulties and suicidal ideation (Mikolajczak et al., 2020). At the marital level, marital conflict and partner estrangement may arise or worsen. At the child level, there is a risk of neglect and violence behaviors directed towards children (Mikolajczak et al., 2018, 2019).

Based on the assumption that lockdown would be accompanied by an increased risk of parental burnout, several recommendations have been published in recent months to help professionals support parents (Coyne et al., 2020; Fontanesi et al., 2020; Griffith, 2020). However, to date, none of these publications could confirm this hypothesis. Only two studies evaluated the level of parental burnout during lockdown : first (Fontanesi et al., 2020) among

1126 Italian parents showed that parents of children with a mental or physical disorder experienced more parental burnout than other parents, second (Syazwani et al., 2020) among 145 Malaysian working parents showed that 14,5% of parents experienced a score equal to or greater than 58 on Parental Burnout Inventory (Roskam et al., 2017). However, these studies did not compare these data with other data obtained in a more normative context, thus preventing identification of the specific consequences of lockdowns on parental burnout. Moreover, these publications are based on the idea that lockdowns would increase educational demands and reduce social resources, and therefore, would induce a disequilibrium, and thus, parental burnout. However, the published recommendations on the identification of risk and protective factors regarding parental burnout emphasize that dispositional factors (e.g., emotional competence, personality) carry more weight in the balance than environmental factors (e.g., family type, work time) (Le Vigouroux & Scola, 2018; Lebert-Charron et al., 2018; Mikolajczak et al., 2017; Sánchez-Rodríguez et al., 2019).

The objective of this study is to compare the levels of parental burnout during the period of lockdown to the levels of parental burnout assessed at a time prior to the COVID-19 health crisis in a sample of parents living in France. In accordance with the BR² theory, which posits that sociodemographic and circumstantial factors have lower weight in the development of parental burnout compared to dispositional factors, we hypothesize that parents should not have higher levels of parental burnout during the lockdown period compared to those evaluated outside the context of the health crisis. More precisely, children's age, maintaining professional activities and having to do school at home should only slightly increase the rate of parental burnout among parents during lockdown.

Method

Participants

The data were collected from two different French samples as part of the International Investigation on Parental Burnout (IIPB). The IIPB is a large study that aims to examine the prevalence and cultural differences in parental burnout in more than 40 countries gathered in a consortium. To participate in both studies, the only inclusion criterion was having at least one child living at home (the age of the child was irrelevant). Data collection at both points was conducted on two independent samples. The first collection was conducted from March 20 to June 11 (first French lockdown), 2018 with 1,332 parents (including 1,084 mothers, sample 1). The second collection was conducted from April 23 to May 11, 2020 with 488 parents (including 419 mothers, sample 2). The sociodemographic characteristics of the two samples are presented in Table 1.

Procedure

Both data collections were carried out via online questionnaire platforms (LimeSurvey in 2018 and Qualtrics in 2020). Prior to accessing the questionnaires, parents were provided information about the objectives and procedures of the study and gave their informed consent. During the first collection, a total of 2,013 parents accessed the data collection platform, including 681 who did not complete participation in this study. In the second collection, 665 parents accessed the collection platform, but 143 of them did not complete the study. The two online questionnaires were distributed on social media (e.g., on Facebook, on pages dedicated to parenthood) and among the social networks of the investigators. Both data collections received approval from the Ethics Committee for Research on Health (CERES) of the University of Paris Descartes (N°IRB: 2018-29 and N°IRB: 0001202020-42, respectively).

Measures

For both data collections, parents answered various questions concerning sociodemographic data, including gender, age and level of education of the parent, family composition (living with a coparent, single-parent, or other), the number of children and the number of children living in the parental home, whether or not they were working, and if so, the number of hours per week, and if they had to provide schooling at home for their children.

Parental burnout was measured using the Parental Burnout Assessment (Roskam et al., 2018). The PBA is composed of 23 items divided as follows: 9 items for emotional exhaustion (e.g., I feel completely run down by my role as a parent), 5 items for saturation (e.g., I can't stand my role as father/mother any more), 6 items for contrast (e.g., I don't think I'm the good father/mother that I used to be to my child(ren)), and 3 items for emotional distancing (e.g., I do what I'm supposed to do for my child(ren), but nothing more). Participants were asked to respond to each item on a 7-point frequency scale: 0 (never), 1 (a few times a year or less), 2 (once a month or less), 3 (a few times a month), 4 (once a week), 5 (a few times a week), and 6 (every day). The PBA has good internal consistency across the two data collection times for the total scores (sample 1: $\alpha = .97$, sample 2: $\alpha = .97$) and the subdimensions of emotional exhaustion (Sample 1: $\alpha = .94$, sample 2: $\alpha = .94$), saturation (sample 1: $\alpha = .92$, sample 2: $\alpha = .91$), contrast (sample 1: $\alpha = .91$, sample 2: $\alpha = .90$) and emotional distancing (sample 1: $\alpha = .77$, sample 2: $\alpha = .75$).

Statistical analysis

First, we verified that the two samples were comparable to each other on sociodemographic variables using independent samples T-tests and Chi² tests, and Cohen's d was calculated to determine the effect size. Second, we carried out mean comparisons to examine differences on parental burnout between the two sample. Concerning parental burnout scores, the distributions were not Gaussian (the Shapiro-Wilk tests were significant) but had

positive asymmetric distributions. The comparisons of means for these five variables were therefore carried out with Mann-Whitney U-tests, and the rank-biserial correlation was calculated to obtain the effect size. Third, generalized linear models (GLMs) for an asymmetric distribution (family = gamma) were carried out to estimate the influence of demographic variables (number of children in each age group and having a job or not having a job) on parental burnout in the two groups. We completed these analyses by calculating correlations between the dimensions of parental burnout and the number of hours worked for the two samples.

Results

Similarities and differences between the two samples

Mean comparisons (t-tests, Table 1) showed that the two samples from 2018 and 2020 were similar in terms of children's age and number of children. Participants were predominantly mothers, and 81% were mothers in the 2018 sample and 85% were mothers in the 2020 sample. Concerning family structure, chi² tests showed that the proportion of single-parent families was similar between the two samples. On the other hand, the two samples differed very slightly ($d=-.17$) in the number of years of parent schooling from the age of 6 years (age of beginning elementary school, equivalent to US 1st grade). Parents in sample 2 had a slightly higher average than parents in sample 1.

As expected in the context of a lockdown, the two samples differed slightly and significantly in the mean number of hours worked per week (parents in sample 2 reported working on average approximately 3 hours less than parents in sample 1), in the average number of children at home (parents in sample 2 reported having very slightly more children living at home than parents in sample 1) and in the age distribution of children at home (parents in sample 2 reported having more children over the age of 15 at home than parents in sample 1, as many

students returned to live with their parents). Thus, these comparisons highlight some differences, but they remain very small.

A second step was to compare the levels of parental burnout and of each of its subdimensions in the two samples carried out before and during the lockdown. Concerning parental burnout, the results showed a very slight but significant difference in parental burnout due to a small but significant difference in the saturation. Parents in sample 2 reported more saturation than parents in sample 1 (Table 1).

Table 1
Descriptive data (percentage, mean and standard deviation) and comparison of the two samples

	Sample 1 (N = 1332)			Sample 2 (N = 522)			χ^2	<i>t</i>	<i>d</i>	<i>U</i>	Rank- biserial correlation
	%	M	SD	%	M	SD					
Gender (mother)	81.38			85.63			4.71*				
Parents' age		38.14	8.54		37.45	6.97		-1.65	.09		
Number of children		1.97	.90		2.01	.95		.50	-.03		
Number of children at home		1.85	.84		2.01	.95		2.99*	-.15		
Distribution of children by age											
0-4 years	46.37			36.55			28.70***				
5-9 years	30.40			24.54			12.14*				
10-14 years	14.71			17.02			2.65				
15-18 years	6.01			10.06			16.31***				
19 years and more	2.51			11.82			46.81***				
Number of successful years of study from when parent was 6 years		15.08	3.17		15.61	3.26		3.21**	-.17		
Professional activity	83.03			83.14			.003				
Hours worked per week		36.55	9.25		33.71	11.29		-5.06***	.29		
Family type											
With a coparent	87.69			91			4.07*				
Single parent	11.4			8.43			3.53				
Other	.90			.57							
Home schooling				72							
Parental Burnout		29.1	28		31.36	27.63				321985*	-.07
Emotional Exhaustion		14.79	12.9		15.68	12.67				327791.5	-.06
Saturation		5.09	6.22		6.06	6.58				307430***	-.12
Contrast		6.12	7.61		6.41	7.44				331895.5	-.05
Emotional Distancing		3.10	3.54		3.20	3.54				334753	-.04

*: $p < .05$, **: $p < .01$, ***: $p < .001$

Note: For Student's t-tests, effect size is given by Cohen's d. For the Mann-Whitney U-tests, effect size is given by rank biserial correlation.

Impact of children's age

To study the influence of children's age on parental burnout and its subdimensions in the two samples, we conducted GLM. AICs used to compare model fit are presented in Table 2. For each variable to be explained, four increasingly complex models were estimated. The first model (M0) considers only the influence of the year of collection. The second model (M1.1.) considers only the influence of the age of the children, or more precisely, the influence of the number of children in the 5 age categories of children (aged from 0 to 4 years old, from 5 to 9 years old, from 10 to 14 years old, from 15 to 18 years old and over 19 years old). The third model (M1.2.) simultaneously considers the influence of the year of collection and children's age, whereas the fourth model (M1.3.) considers the interaction between the year of collection and children's age.

Our results show that the model that best explains parental burnout and its subdimensions is the one that exclusively considers children's age (smallest AIC). In other words, the year of collection (i.e., during lockdown or not) is not a variable that produces better adjustment of the model as it does not explain differences in parental burnout or any of its subdimension scores. Concerning the influence of children's age on parental burnout, the details of the models highlight that for each age group, the parents with more children aged 0 to 4 years and 5 to 9 years tend to report more parental burnout (although the standardized coefficients remain low, $-.004, p < .001$ and $-.003, p < .01$, respectively). Conversely, the parents with more children aged 15 to 18 years and 19 years and over are less likely to report parental burnout (although here again the standardized coefficients remain low, respectively $.01$ and $.007, ps < .001$).

Table 2
GLM AICs explaining parental burnout and its subdimensions by year of collection and the number of children in each age group (0-4 years, 5-9 years, 10-14 years, 15-18 years and over 19 years) or if involved in a professional activity.

	Parental Burnout	Emotional Exhaustion	Saturation	Contrast	Emotional Distancing
M0. Year of data collection	16 177	13 566	7 969.3	8 022.3	5 418.6
Impact of children's age					
M1.1. Number of children in each age group	16 125	13 504	7 946.9	8 013	5 410.5
M1.2. Year of data collection + Number of children in each age group	16 127	13 506	7 947	8 015	5412.5
M1.3. Year of data collection * Number of children in each age group	16 131	13 511	7 951.5	8 017.9	5 421.2
Impact of living conditions					
M2.1. Professional activity	16 161	13 553	7 962.1	8 013	5 415
M2.2. Year of data collection + Professional activity	16 162	13 554	7 959.7	8 014.8	5 416.9
M2.3. Year of data collection * Professional activity	16 162	13 555	7 959.9	8 014.2	5 418.7

Note. DoF = 1853.

Impact of living conditions (professional activity and home schooling) on parental burnout during lockdown

To study the environmental consequences (i.e., living conditions) brought by the lockdown (sample 2) on parental burnout and its subdimensions, we were particularly interested in two aspects. The first aspect was the parent's involvement in professional activity. We considered whether the parent was working or not and the number of hours worked per week. The second aspect was the need for the parent to provide their children with school lessons at home during the lockdown due to school closures.

For parent's professional activity, we conducted GLM. AICs used to compare model fit are presented in Table 2. For each variable to be explained, we estimated four increasingly complex models for the age of the children presented above. The first model (M0) considers only the influence of the year of collection. The second model (M2.1.) considers only the influence of having a job or not having a job. The third model (M2.2.) simultaneously considers

the influence of the year of collection and professional activity, whereas the fourth model (M2.3.) considers the interaction between the year of collection and professional activity.

The results for the GLM (Table 2) show that, in general, pursuing a professional activity slightly influenced the level of parental burnout and its subdimensions (the lowest AIC for GLM considering only professional activity without considering the year of collection). On average, working parents have lower parental burnout scores than nonworking parents. More precisely, the correlations between parental burnout and the number of hours worked per week decreased very slightly between the two samples ($r_{S1} = -.12, p < .001$; $r_{S2} = -.08$ *ns*), as it did for the subdimensions (emotional exhaustion: $r_{S1} = -.14, p < .001$; $r_{S2} = -.08$ *ns*; saturation: $r_{S1} = -.11, p < .001$; $r_{S2} = -.08$ *ns*; contrast: $r_{S1} = -.10, p < .01$; $r_{S2} = -.02$ *ns*; and emotional distancing: $r_{S1} = -.05$ *ns*; $r_{S2} = -.07$ *ns*). In general, our results highlight that i. the more the parent works, the less likely he or she is to experience parental burnout, but the relationship is weak, and ii. this relationship disappears in the parents in sample 2.

To consider the need for the parent to provide their children with school lessons at home during the lockdown due to school closures, we carried out mean comparisons (Mann-Whitney test) among parents in sample 2. Seventy-two percent of the parents in sample 2 reported having provided home schooling to their children. The parents who did not provide home schooling to their children were parents with only young children (aged 0 to 4 years). Our results show that, on average, parents who had to provide their child(ren) with schooling at home did not experience more parental burnout ($M = 31.98, SD = 27.52$) than those who had not ($M = 29.77, SD = 27.95$; $U = 25721.5$ *ns*). More specifically, mean comparisons also indicated similar levels for each of the subdimensions of parental burnout ($U_{\text{Emotional exhaustion}} = 27689$ *ns*, $U_{\text{Saturation}} = 24806.5$ *ns*, $U_{\text{Contrast}} = 27398$ *ns*, and $U_{\text{Emotional Distancing}} = 25274.5$ *ns*) between parents who provided home schooling ($M = 15.63, 6.31, 6.44, \text{ and } 3.29$, respectively) and those who did not ($M = 15.80, 5.42, 6.31, \text{ and } 2.99$, respectively).

Discussion

The purpose of this study was to examine the consequences of the first lockdown caused by the worldwide COVID-19 health crisis on parental burnout among French parents. The consequences on parents' experiences were considered by comparing data from two independent samples of French parents, one of which was collected during the lockdown (sample 2) from 522 parents, and the other was collected two years before in a normal context (sample 1) from 1332 parents. Lockdown has modified daily family functioning and was supposed to increase the risk of parental burnout. Several publications (e.g., Brooks et al., 2020) have proposed recommendations based on this assumption indeed. Conversely, because lockdown does not influence dispositional resources, which are more important than contextual ones in predicting parental burnout, we hypothesized that there would be no effect of the lockdown on parental burnout in comparison with the level observed before lockdown. To our knowledge, the present study is the first to compare parental burnout levels before and during lockdown and examine the role of several contextual dimensions.

The main result highlights a small, but significant, difference in parental burnout between the two samples. Parents in sample 2 scored slightly higher than parents in sample 1. This difference in parental burnout relies essentially on a slight but significant increase in saturation scores (i.e., loss of pleasure in parenting). Conversely and as expected, scores for emotional exhaustion, contrast and emotional distancing were similar between the two samples. This result is contrary to expectations of professionals and researchers (Fontanesi et al., 2020; Griffith, 2020). Indeed, lockdown resulted in a change in parental support, possibly reducing the number of sources of help outside the family and changing how tasks are shared between parents within the family. However, the present study indicates that these environmental changes have had limited impact on the level of parental burnout. This small variance between our two samples is understandable if we consider previous studies conducted on risk factors for the development

of parental burnout (e.g., Le Vigouroux & Scola, 2018; Mikolajczak et al., 2017). Indeed, in the risk-resource balance, dispositional factors (e.g., personality, emotional competences, attachment) have a greater weight than demographic factors (e.g., age of children or parent, single parent, having a job) on the sociodevelopment of parental burnout.

In addition to previous observations, we completed our analyses by integrating sociodemographic variables (i.e., number of children in each age group, having a job or not, number of worked hours, and need for the parent to provide their children with school lessons at home during the lockdown due to school closures). Studies about the influence of children's age suggest that having children under the age of 5 is a risk factor for parental burnout (e.g., Mikolajczak et al., 2017; Sánchez-Rodríguez et al., 2019). Thus, our results support the lower importance of these variables on parental burnout levels. First, concerning the number of children in each age group (0-4 years, 5-9 years, 10-14 years, 15-18 years, and 19 years and more), our results confirm previous studies that showed that children's age partially explained parental burnout, but there were no differences between the two samples. More precisely, lockdown does not seem to modify the age-related influence of having children, especially young children, on parental burnout and its subdimensions among French parents. Second, concerning needing to take on the role of teacher at home, our results indicated that this situation did not explain differences in parental burnout between our two samples. This finding is consistent with studies on the low importance of sociodemographic factors (e.g., Mikolajczak et al., 2017). Third, with regard to the influence of pursuing a professional activity, our results confirm in both samples the beneficial effect of parents engaging in professional activity on parental burnout (Lebert-Charron et al., 2018).

These results should be confirmed by other studies that more precisely identifies children's age and with parents in lockdown and parents not in lockdown. Furthermore, it would be interesting to specifically study the influence of dispositional variables on parental burnout

during lockdown, such as the emotional regulation strategies or emotional intelligence used by parents in relation to their interactions with their children during lockdown. Studies on the identification of risk factors for parental burnout (e.g., Le Vigouroux & Scola, 2018; Lebert-Charron et al., 2018; Mikolajczak et al., 2017; Sánchez-Rodríguez et al., 2019) point to the strong influence of parents' dispositional characteristics. Parents need to regulate their own and their children's emotions, and it would be interesting to look at the parents' (and children's) emotional competences and their influence on the parents' (and children's) emotional experience.

Overall, our results diverge from those expected by professionals at the time of the first lockdown in France. A first explanation for the few differences between our two samples is that in the risk-resource balance, dispositional factors have much more weight than sociodemographic factors. It is also possible that our results do not put forward more parents with high parental burnout scores because they would not have responded to our study. It is also possible to add a cultural explanation. Indeed, from the announcement of the first lockdown in March 2020, the French government provided a set of social measures to support French citizens during this period, including parents. For example, on a financial level, a plan for assistance with partial unemployment and postponement of deadlines (in terms of taxes) was put in place. Although the schools were closed, teaching continued through homework exercises and sometimes online classes. This maintenance of school activities reduced the risk of isolation, structured the pursuit of learning, and kept the days busy. In addition, professionals were quickly engaged to support families through various communications in media and through support devices, such as free call platforms such as '*Enfance & Covid*'¹ for professionals

¹ <http://www.enfance-et-covid.org/>

and families. Therefore, it is possible that the small difference between our two samples would not be found in other countries.

This exploratory study has some limitations. The main limitation is that two different samples of parents were compared, involving that our results do not consider intraindividual variability. However, the current context and the implementation of a second lockdown announced on October 28th, 2020 invite us to conduct further studies on this subject. A second limitation concerns the data collection period and parents' worries related (Sample 1: from March 20th to June 11th, 2018; Sample 2: from April 23 to May 11, respectively). It should be noted that June is a special month in the school calendar for parents given the children's school exams and decisions for the children's future that sometimes have to be made in this period. A final limitation of our study is that we did not question the parents on some points that would allow us to refine our results (e.g., working at home or not, support resources available for them to cope).

In conclusion, our results highlight a small difference in parental burnout between our two samples of French-parents. On average, the parents interviewed during lockdown reported slightly higher parental burnout score (and particularly saturation) than the parents interviewed two years earlier. Although less than feared, some parents experienced confinement as a probable precipitant of their difficulties. Although these results need to be confirmed by other studies (in possible future lockdowns and in other countries), they highlight the importance of dispositional risk factors in the risk/resource balance of parental burnout.

Bibliography

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: rapid review of the evidence. *The Lancet*, 395(10227), 912–920. <https://doi.org/10.1016/S0140->

- Coyne, L. W., Gould, E. R., Grimaldi, M., Wilson, K. G., Baffuto, G., & Biglan, A. (2020). First Things First: Parent Psychological Flexibility and Self-Compassion During COVID-19. *Behavior Analysis in Practice*. <https://doi.org/10.1007/s40617-020-00435-w>
- Fontanesi, L., Marchetti, D., Mazza, C., Di Giandomenico, S. D., Roma, P., & Verrocchio, M. C. (2020). The Effect of the COVID-19 Lockdown on Parents: A Call to Adopt Urgent Measures. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*, 79–81. <https://doi.org/10.1037/tra0000672>
- Gérain, P., & Zech, E. (2018). Does informal caregiving lead to parental burnout? Comparing parents having (or Not) children with mental and physical issues. *Frontiers in Psychology*, *9*(JUN), 1–10. <https://doi.org/10.3389/fpsyg.2018.00884>
- Gérain, P., & Zech, E. (2019). Informal Caregiver burnout? Development of a theoretical framework to understand the impact of caregiving. *Frontiers in Psychology*, *10*(JULY). <https://doi.org/10.3389/fpsyg.2019.01748>
- Griffith, A. K. (2020). Parental Burnout and Child Maltreatment During the COVID-19 Pandemic. *Journal of Family Violence*. <https://doi.org/10.1007/s10896-020-00172-2>
- Kawamoto, T., Furutani, K., & Alimardani, M. (2018). Preliminary validation of Japanese version of the parental burnout inventory and its relationship with perfectionism. *Frontiers in Psychology*, *9*, 970. <https://doi.org/10.3389/fpsyg.2018.00970>
- Le Vigouroux, S., & Scola, C. (2018). Differences in parental burnout: Influence of demographic factors and personality of parents and children. *Frontier*, DOI: [10.3389/fpsyg.2018.00887](https://doi.org/10.3389/fpsyg.2018.00887).
- Le Vigouroux, S., Scola, C., Raes, M.-E., Mikolajczak, M., & Roskam, I. (2017). The big five personality traits and parental burnout: Protective and risk factors. *Personality and*

- Individual Differences*, 119, 216–219. <https://doi.org/10.1016/j.paid.2017.07.023>
- Lebert-Charron, A., Dorard, G., Boujut, É., & Wendland, J. (2018). Maternal burnout syndrome: Contextual and psychological associated factors. *Frontiers in Psychology*, 9(JUN). <https://doi.org/10.3389/fpsyg.2018.00885>
- Mikolajczak, M., Brianda, M.-E., Avalosse, H., & Roskam, I. (2018). Consequences of parental burnout: Its specific effect on child neglect and violence. *Child Abuse and Neglect*, 80(October 2017), 134–145. <https://doi.org/10.1016/j.chiabu.2018.03.025>
- Mikolajczak, M., Gross, J. J., & Roskam, I. (2019). Parental Burnout: What Is It, and Why Does It Matter? *Clinical Psychological Science*, 7(6), 1319–1329. <https://doi.org/10.1177/2167702619858430>
- Mikolajczak, M., Gross, J. J., Stinglhamber, F., Lindahl Norberg, A., & Roskam, I. (2020). Is Parental Burnout Distinct From Job Burnout and Depressive Symptoms? In *Clinical Psychological Science* (Vol. 8, Issue 4). <https://doi.org/10.1177/2167702620917447>
- Mikolajczak, M., Raes, M.-E., Avalosse, H., & Roskam, I. (2017). Exhausted Parents: Sociodemographic, Child-Related, Parent-Related, Parenting and Family-Functioning Correlates of Parental Burnout. *Journal of Child and Family Studies*, 26(10), 1–13. <https://doi.org/10.1007/s10826-017-0892-4>
- Mikolajczak, M., & Roskam, I. (2018). A theoretical and clinical framework for parental burnout: The balance between risks and resources (BR 2). *Frontiers in Psychology*, 9, 886. <https://doi.org/10.3389/fpsyg.2018.00886>
- Roskam, I., Brianda, M.-E., & Mikolajczak, M. (2018). A Step Forward in the Conceptualization and Measurement of Parental Burnout: The Parental Burnout Assessment (PBA). *Frontiers in Psychology*, 9(758). <https://doi.org/10.3389/fpsyg.2018.00758>

- Roskam, I., Raes, M.-E., & Mikolajczak, M. (2017). Exhausted parents : Development and validation of the Parental Burnout Inventory. *Frontiers in Psychology*, 8(163).
<https://doi.org/10.3389/fpsyg.2017.00163>
- Sánchez-Rodríguez, R., Callahan, S., & Séjourné, N. (2018). L'épuisement des mères de jeunes enfants: Une étude exploratoire. *Journal de Therapie Comportementale et Cognitive*.
<https://doi.org/10.1016/j.jtcc.2017.12.002>
- Sánchez-Rodríguez, R., Perier, S., Callahan, S., & Séjourné, N. (2019). Revue de la littérature relative au burnout parental. *Canadian Psychology*, 60(2), 77–89.
<https://doi.org/10.1037/cap0000168>
- Sorkkila, M., & Aunola, K. (2020). Risk factors for parental burnout among Finnish parents: The role of socially prescribed perfectionism. *Journal of Child and Family Studies*, 29(3), 648–659. <https://doi.org/10.1007/s10826-019-01607-1>
- Syazwani, A. M., Iylia, M., Ismail, H., & Nurul, I. Y. (2020). Working parents and emotionally parental burnout during malaysia movement control order (Mco). *European Journal of Molecular & Clinical Medicine*, 7(2), 4930–4953.