

“Spread too thin”: Parents’ experiences of burnout during COVID-19 in Australia

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Abstract

Objective: We aimed to investigate parental burnout (PB) within an Australian context during COVID-19.

Background: Little is known about how the increase in the parental burden created by COVID-19 restrictions has affected parents and whether this has resulted in increased PB.

Method: A mixed-methods approach examined PB in a sample of Australian parents ($N = 403$) during COVID-19. Regression analyses were conducted to identify predictors of PB, and multivariate analysis of covariance (MANCOVA) was used to compare PB scores to scores collected prior to COVID-19. Thematic analysis was used to understand the qualitative experience of parenting during lockdowns.

Results: PB scores obtained during COVID-19 were significantly higher than pre-COVID-19, and prevalence of PB almost doubled. Age of the parent was the most significant predictor of PB, although gender of the parent, average age of children, and number of children were also predictors on the PB subscales. Qualitatively, parents reported increased stress and a loss of coping mechanisms during lockdown, and this commonly led to negative outcomes.

Conclusion: Results suggest that parents struggled to cope with the additional responsibilities and the reductions to resources created by COVID-19 restrictions.

Implications: These findings support researchers globally who call for interventions that support parents during periods of COVID-19 restrictions.

KEYWORDS

COVID-19, exhaustion, lockdown, parental burnout, PBA, stay-at-home orders

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The COVID-19 pandemic reached Australia in January 2020. Shortly after, state and federal governments began to enact various social distancing measures, called “stay-at-home orders” (colloquially known as lockdown laws), with the intention of stopping the spread of the virus. During this time, Australians were only able to leave their houses for brief periods of exercise, to obtain medical care, or for essential goods and services. These measures had a dramatic impact on the lives of most Australians. By April 2020, 1.8 million Australians were unemployed or working reduced hours as a consequence of COVID-19 (Australian Bureau of Statistics [ABS], 2021). Those still employed were requested to work from home where possible, and most school-age children were required to undertake home-based online learning as a result of school closures.

Although these measures had the intended effect of stopping the spread of COVID-19 within Australia, they had a severe impact on mental health. Globally, the pandemic has led to increased depressive symptoms, greater stress, anxiety, anger, fear, and physical symptoms, such as insomnia (Torales et al., 2020). Similarly, within Australia, COVID-19 restrictions have been associated with impaired work and social functioning, which have led to elevated levels of depression and anxiety (Dawel et al., 2020). Among adults, reports of mental distress have doubled since the onset of COVID-19 (Butterworth, 2020; Fisher et al., 2020). Of particular concern is the welfare of Australian parents. During the pandemic, the rate of parental mental distress tripled to 24% from the pre-pandemic rate of just 8% (Broadway et al., 2020). Findings from a longitudinal study suggest that these high levels of distress are brought on by lockdown and social distancing measures (Johnson et al., 2021). Their study investigated parental stress and symptoms of anxiety and depression in a sample of parents at two time points: during a period of lockdown and 3 months after the discontinuation of these measures. Results showed that levels of parental stress and symptoms of depression and anxiety significantly decreased when the lockdown laws were removed, indicating that, for parents, the experience of lockdown increased their susceptibility to stress and was harmful to their mental health. Furthermore, research has shown that successfully balancing work and homeschooling may be beyond the capabilities of many parents, leading to physical and mental exhaustion and negatively impacting well-being (Johnson et al., 2020; Marchetti et al., 2020). Within Australia, in a survey of over 7,000 families, 68% of parents reported that, while working, they almost always had to simultaneously care for their children in some way (Hand et al., 2020). Parents reported that it was a struggle that left them feeling worried and guilty. In addition, a recent qualitative study examined the experiences of Australian families during a period of lockdown and social distancing and found that many parents expressed concerns for their mental health and that of their children. Concerningly, parents reported increased depression and suicidal ideation during lockdown restrictions (Evans et al., 2020). However, the adverse effects of restrictions were not universal, with some parents reporting benefits such as strengthened relationships and the development of tolerance, appreciation, and gratitude.

Parental mental health is vital, as an individual family member’s stress impacts other members through altered social interactions (Thomson & Vaux, 1986). For instance, parental stress stemming from lockdown laws and social distancing measures has been found to impact the quality of parents’ interactions with their children, which then affected the children’s well-being (Spinelli et al., 2020). In addition, research indicates that the sustained burden on parents created by the COVID-19 pandemic has led to a decrease in mental health, which was then linked to a deterioration in child–parent closeness and an increase in conflict (Russell et al., 2020). Similarly, it has been demonstrated that parent exhaustion has immediate detrimental effects on the quality of parent–child relationships (Gillis & Roskam, 2019). Researchers argue for a bidirectional relationship between parental stress and children’s behavior; exhausted and highly distressed parents may be less available, accessible, and responsive to their children’s needs, which leads to behavioral problems and, consequently, more stress for parents (Kerr et al., 2021; Marchetti et al., 2020; Russell et al., 2020).

If chronic parenting stress is left untreated, and parents lack the resources to cope with this stress, it can lead to parental burnout (PB; Mikolajczak & Roskam, 2018; Roskam & Mikolajczak, 2020). PB is defined as a state of extreme exhaustion related to one's parental role (Roskam et al., 2017), in which the parent becomes emotionally detached from their child and doubtful of their capacity to be a good parent (see also Roskam et al., 2018a). PB is made up of four subdimensions: exhaustion in one's parental role; saturation, which refers to a loss of pleasure in parenting; contrast, which is a feeling that one is not the parent they once were; and emotional distancing from one's children (Mikolajczak & Roskam, 2020; Mikolajczak et al., 2019). Studies have highlighted a myriad of negative consequences for parents experiencing burnout and their children, including parental escape, suicidal ideation, increased feelings and expression of parental anger, and neglect of and violence toward children (Mikolajczak et al., 2019; Mikolajczak, Brianda, et al., 2018; Prikhidko & Swank, 2020; Roskam & Mikolajczak, 2020; Szczygieł et al., 2020). Unsurprisingly, results from longitudinal research have revealed that when parents experience PB, their children exhibit greater symptoms of depression and anxiety (Yang et al., 2021).

Research into burnout in parents of children without chronic or serious illnesses and conditions has only gained traction in the last 5 years. Researchers have found that parents with the highest risk for burnout possess low self-efficacy beliefs, have trouble managing stress or emotions, desire to be a perfect parent, and perceive their parental role restricts the attainment of personal goals (Mikolajczak, Raes, et al., 2018). In addition, being a mother, a younger parent, and having a greater number of children at home increase the risk for burnout (Kawamoto et al., 2018; Lindström et al., 2011; Sorkkila & Aunola, 2020). Environmental risk factors include a lack of leisure time, low social support, coparent conflict and family disorganization, unemployment, residing within an individualistic culture, and being in a poor financial situation (Lebert-Charron et al., 2018; Lindström et al., 2011; Mikolajczak & Roskam, 2018; Mikolajczak, Raes, et al., 2018; Roskam et al., 2021; Sorkkila & Aunola, 2020). However, risk factors alone are insufficient to determine burnout. Instead, it is the presence of risk factors in the absence of compensatory resources, such as social support, that provides the strongest predictor for burnout (Brown et al., 2020; Marchetti et al., 2020; Mikolajczak & Roskam, 2018; Szczygieł et al., 2020).

The theoretical framework for PB, called the Balance between Risks and Resources (BR²) theory, was developed to understand why some parents experienced burnout when other parents facing similar circumstances did not (Mikolajczak & Roskam, 2018). BR² suggests that PB threatens any parent who accumulates too many risks without sufficient compensatory resources (Mikolajczak & Roskam, 2018). The COVID-19 pandemic has influenced these risk and protective factors. For instance, parental stress has increased (Brown et al., 2020; Johnson et al., 2020), concomitantly, access to resources has decreased (Hand et al., 2020). It is unsurprising then, that researchers have expressed concern that PB has increased during the pandemic, as well as concerns expressed for the welfare of parents and children, including concerns of child abuse and neglect (Griffith, 2022; Johnson et al., 2021). Certainly, findings of increased pressures and reduced resources (Hand et al., 2020) and higher levels of mental health issues among parents during COVID-19 (Evans et al., 2020) indicates that PB may be higher in Australian parents during the pandemic, although PB was not directly measured in these studies. These concerns may be particularly relevant for those who were disadvantaged or coping with reduced resources pre-pandemic. For example, younger parents tend to have reduced self-esteem, less parental knowledge, fewer resources, poorer health, and less life satisfaction as well as less relationship and work satisfaction when compared to older parents (Casad et al., 2012). Similarly, even in the best of times, those with more children possess fewer financial and parental resources (Downey, 1995). Additionally, mothers are negatively impacted by societal pressure to be a perfect mother, even if they do not subscribe to such ideas (Henderson et al., 2016). Socially prescribed and self-oriented perfectionism are risk factors for PB (Sorkkila & Aunola, 2020; see also Kawamoto et al., 2018).

Internationally, research supports suggestions that PB has increased during the pandemic. For instance, investigations into the associations between parent and child well-being during the onset of the COVID-19 pandemic have revealed that parents who reported greater psychological impacts of the pandemic also reported feeling more burned out in their role as parents (Kerr et al., 2021). In addition, a comparative study found a significant increase in both levels and incidents of PB during a period of COVID-19 restrictions in Portugal compared to pre-COVID-19 levels (Aguiar et al., 2021). Similarly, a study of French parents compared pre-COVID-19 PB levels to burnout levels during a period of COVID-19 restrictions. They found a slight but nonetheless significant difference in global burnout scores, mainly stemming from differences in saturation or a loss of pleasure in parenting (Le Vigouroux et al., 2022).

Researchers have stressed the urgent need for evidence-based investigations of the impact of the current global pandemic on the well-being of parents and children, arguing that the results are needed to initiate and inform the development of social policies that support burdened parents during this unprecedented period (Fontanesi et al., 2020). Global reactions to the pandemic have varied; therefore, outcomes are also likely to differ between countries. As such, country-specific research on the impact of the COVID-19 pandemic on PB is necessary. Furthermore, examining the construct of PB in diverse cultures is essential, as parenting occurs in a social and cultural context (Bornstein et al., 2011). Cultural values influence attitudes and expectations toward parenting (Binder, 2019), and culture has been found to play a role in development of PB. Specifically, parents from Western individualistic cultures, such as Australia, possess a greater vulnerability to the development of parental burnout (Roskam et al., 2021). Despite this, few studies have examined the relationship between COVID-19 restrictions and rates and levels of PB, and none in Australia. There is now a pressing need to address this gap in the research.

Purpose of the present study

The aim of this study was to investigate PB in Australian parents during the COVID-19 pandemic, using a mixed-methods approach, and to compare the PB scores during COVID-19 with a pre-COVID-19 sample of Australian parents. Additionally, as research has suggested that there may be country-specific differences in the role of demographic variables in PB, we aimed to test demographic predictors of PB that had been identified in samples internationally (Kawamoto et al., 2018; Roskam et al., 2021; Sorkkila & Aunola, 2020). Specifically, we proposed two hypotheses. Hypothesis 1: Consistent with previous research, it was predicted that younger parents, mothers, those with more children and younger children, as well as those not working or working part-time, would have significantly higher burnout scores. Hypothesis 2: It was predicted that PB scores obtained from a sample of Australian parents during COVID-19 would be higher than scores obtained from a sample of Australian parents prior to the COVID-19 pandemic.

METHOD

Participants

Participants in this study were recruited through Facebook advertising from May 2020 through July 2020. This data collection period captured participants' experiences of parenting during periods of COVID-19 related restrictions. However, the severity of these restrictions varied state by state and changed across the data collection period. In the two most populous Australian states, New South Wales and Victoria, restrictions began easing on May 15, 2020, and June 1, 2020, respectively. However, although schools reopened, the work-from-home mandate remained, and movement was still restricted to some extent. To participate, participants needed

to be over the age of 18 and have at least one child living at home. These data were collected as part of a bigger project, which aimed to examine the associations between PB and romantic relationships. Therefore, participants were also required to be in a relationship at the time of survey completion. This yielded a final sample of 403 Australian parents between the ages of 20 to 62 years (M age = 40.50 years, $SD = 7.30$). Of these parents, 372 were women (92.3%) and 31 were men (7.7%). Participants had an average of two children, with 383 participants having four or fewer children and 20 participants having five or more children. Participants identified ethnically as 77.2% Australian, 5.2% European, 3.7% Asian, 2.2% Indian, 2% New Zealander, 1.5% Middle Eastern, and 1% Hispanic.

In addition, we were granted permission to use the Australian data from a study by Roskam and colleagues (2020), which were collected between February and May 2019 (prior to the COVID-19 pandemic). A full description of their method is available at Roskam et al. (2020). Henceforth, participants in the Roskam study will be referred to as *pre-COVID-19* participants, and those collected during COVID-19 are called *during COVID-19* participants. A comparison of participant characteristics between the two samples is in Table 1. There were 212 participants in the pre-COVID-19 sample. On average, parents in the pre-COVID-19 sample were significantly older, and there were a significantly greater proportion of fathers in comparison to the during COVID-19 sample. Although they also had statistically fewer children, this is unlikely to be meaningful as both samples had an average of two children.

Materials

As this paper discusses only the PB aspect of the study, the measures used to collect information on relationship satisfaction are not described here. The study was approved by the Navitas Professional Institute Human Research Ethics Committee (approval number 589140520).

Demographics

Participants answered various demographic questions, including participant gender, age, number of children living at home, age and gender of children, work status, and information regarding special needs of the child.

The Parental Burnout Assessment

The Parental Burnout Assessment (PBA; Roskam et al., 2018b) is a 23-item self-report measure of PB. Responses are given on a 7-point Likert 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*, 6 = *every day*), and it includes items such as “I feel completely run down by my role as a

TABLE 1 Comparison of pre-COVID-19 ($N = 212$) and during COVID-19 ($N = 404$) sample characteristics

	Pre-COVID-19	During COVID-19	Comparison
Parent's age	$M = 44.80$ ($SD = 0.73$)	$M = 40.49$ ($SD = 0.36$)	$t(318.70) = 5.30, p < .001$
Parent's gender			$\chi^2(1) = 136.72, p < .001$
Female	109	373	
Male	103	31	
No. of children	$M = 2.05$ ($SD = 1.03$)	$M = 2.35$ ($SD = 1.20$)	$t(489.89) = 3.23, p < .001$

parent” and “I feel as though I’ve lost my direction as a dad/mum.” The PBA assesses each of the four components of parental burnout identified by Mikolajczak et al. (2019) with scores provided on subscales of exhaustion, contrast with previous self, saturation, emotional distance, as well as a global score for PB. Higher scores indicate higher levels of PB. Cronbach’s alpha of the PBA is estimated to range between .92 (Szczygieł et al., 2020) and .97 (Aunola et al., 2020). Consistent with previous studies, Cronbach’s alpha in sample one and sample two was $\alpha = .96$, suggesting that the PBA had excellent internal consistency in this sample (Cortina, 1993).

Qualitative component

Parents were asked whether their responses to the survey had been impacted by the COVID-19 restrictions. Those that responded “yes” or “somewhat” were offered the chance to qualify their response in an open text box. To understand the impact of COVID-19 on the participants’ parenting experience and the participants’ parent–child relationship, we asked these participants the following: “Please explain how the COVID-19 situation has affected your relationship with your children and your role as a parent.”

Procedure

Participants were recruited through advertising on private Facebook pages for parents’ groups in Australia. The advertisement directed potential participants to the study’s social media page, where they were provided with plain language information about the study and a link to the online survey, hosted by Qualtrics. Once in the survey, participants were provided with a detailed information sheet and provided informed consent. They then completed the demographic questions, the PBA, and the qualitative questions.

Analytic strategy

There were three aspects to the data analysis. First, in order to understand predictors of burnout in a sample of Australian parents during COVID-19, a series of hierarchical linear regression analyses were conducted testing the predictor variables (parent’s age, average age of children, number of children, work status, parent’s gender) against the total PBA score, as well as scores on each of the subscales. As work status was a nondichotomous categorical predictor it was dummy coded prior to analysis. The order of entry of variables into the model was determined by previous research (Mikolajczak, Raes, et al., 2018). Effect sizes presented using adjusted R^2 were evaluated against Cohen’s (1992) conventions.

Second, a matched samples data set was created to investigate differences in PB between the pre–COVID-19 and during COVID-19 samples. Given the two samples differed on age and gender of the parents, and these have been shown to influence PB, parents in the during COVID-19 sample were matched from a randomized pool of participants in the pre–COVID-19 sample according to gender and age. There were 276 participants in the matched data set, with 214 mothers and 62 fathers, half of which were collected pre–COVID-19 and half during COVID-19. The average age of the participants in the matched sample was 41.82 ($SD = 8.49$). The pre–COVID-19 and during COVID-19 scores on the PBA were compared using multivariate analysis of variance (MANOVA).

Third, a thematic analysis was used to analyze the qualitative responses, using the process set out by Braun and Clarke (2006). Of the 403 parents who participated in the survey, 153 participants chose to respond to the qualitative component. The researchers were operating under

an experiential interpretivist paradigm with a critical realist ontology and were analyzing the data with the aim of understanding participants' experiential accounts of parenting during a COVID-19 lockdown. To facilitate trustworthiness, data were inductively hand-coded independently by both authors, who then met to compare codes. Cohen's kappa of the initial coding indicated a moderate level of agreement ($\kappa = 0.59$). Where there was disagreement, this was discussed and resolved. Codes were clustered into themes, and codes that did not have good support in the data were removed.

RESULTS

Predictors of burnout during lockdown

Correlations revealed significant relations between PBA and parent's gender, and parent's age and children's age (Table 2). Parent's gender was significantly associated with exhaustion, but not any of the other subscales of burnout. Parent's age and children's age were significantly associated with exhaustion and parent's age was significantly associated with contrast with previous parental self. The number of children at home was significantly related to parents' perception of a contrast with previous parental self, but not significantly related to any of the other PBA subscales. Except for a significant relation between not currently employed and contrast ($r = .10, p = .041$), there were no other significant associations between work status and PBA or PBA subscales ($r = -.003$ to $r = -.09$). This indicates that those who were unemployed had higher scores on the contrast subscale compared with those employed or studying.

The results of the regression model indicate a significant outcome, although small effect size. PBA total score as the dependent variable was significant, $F(1, 402) = 23.82, p < .001, R^2_{\text{Adjusted}} = .06$. Age of the parent was the only significant predictor, $B = -0.87$ [$SE = 0.18$], $\beta = -.24, t = -4.88, p < .001, r^2_{\text{part}} = .06$. The regression analysis with exhaustion as the dependent variable revealed a significant small to moderate model fit, $F(4, 398) = 14.70, p < .001, R^2_{\text{Adjusted}} = .12$. Age of the parent ($B = -0.39$ [$SE = 0.13$], $\beta = -.20, t = -2.92, p = .004, r^2_{\text{part}} = .02$), average age of children ($B = -0.38$ [$SE = 0.17$], $\beta = -.15, t = -2.20, p = .029, r^2_{\text{part}} = .01$), gender of the parent ($B = -6.76$ [$SE = 2.60$], $\beta = -.12, t = -2.60, p = .010, r^2_{\text{part}} = .01$), and the number of children ($B = 1.25$ [$SE = 0.57$], $\beta = .11, t = 2.18, p = .030, r^2_{\text{part}} = .01$), were all significant predictors of the exhaustion subscale. This indicates that younger parents, mothers, those with more children, and younger children had higher scores on the exhaustion subscale of the PBA. The regression analysis with contrast as the dependent variable revealed a small but significant model fit, $F(2, 400) = 6.65, p = .001, R^2_{\text{Adjusted}} = .03$. Both age of the parent ($B = -.19$ [$SE = .06$], $\beta = -.15, t = -3.05, p < .002, r^2_{\text{part}} = .02$) and number of children at home ($B = 0.91$ [$SE = 0.39$], $\beta = .12, t = 2.37, p = .018, r^2_{\text{part}} = .01$) were significant independent predictors of the contrast subscale. This indicates that younger parents and parents

TABLE 2 Correlations between the demographic predictors and scores on the PBA during COVID-19 ($N = 404$)

Predictor variable	Dependent variable				
	PBA total	Exhaustion	Contrast	Saturation	Distance
Parent's gender	-.12*	-.17**	-.05	-.06	.01
Parent's age	-.24**	-.32**	-.14**	-.08	-.03
Average age of children	-.18**	-.29**	-.06	-.04	.03
Number of children at home	.06	.04	.10*	.01	.08

Note: PBA = Parental Burnout Assessment.

*Significant at the $p < .05$ level. **Significant at the $p < .01$ level.

with more children at home had higher scores on the contrast subscale of the PBA. There were no significant predictors of the saturation nor the distancing subscales of the PBA.

Comparison between pre-COVID-19 and during COVID-19 parents

As PB is in the early stages of development, there are no established clinical cut off scores. Therefore, cut off scores used in this study were derived from Roskam et al. (2020), who proposed a cut off score of 86, which corresponded to experiencing all symptoms at least once a week or at least 16 symptoms daily. Brianda, Mikolajczak, and colleagues (2020) proposed a second cut off of 92 based on a multi-informant and multi-method approach that matched scores on the PBA with other measures of stress. According to these metrics, 2.4% of the pre-COVID-19 sample were classified as experiencing burnout according to the 92 cut off, and 3.3% were classified as experiencing burnout at the 86 cut off. Parents in the during COVID-19 sample reported a 1.8-fold higher percentage of burnt-out parents with 4.2% of parents experiencing burnout at the 92 cut off and 5.9% at the 86 cut off.

The MANOVA identified a significant effect of sample, Wilk's $\lambda = .92$, $F(4, 271) = 5.85$, $p < .001$, $\eta^2_{\text{partial}} = .08$. There were significantly higher scores on the exhaustion subscale in the during COVID-19 sample ($M = 20.37$, $SD = 15.32$) compared to the pre-COVID-19 sample ($M = 15.90$, $SD = 12.81$), $F(1, 274) = 8.90$, $p = .009$, $\eta^2_{\text{partial}} = .03$. There was no significant difference between pre-COVID-19 and during COVID-19 participants on contrast with previous parental self, $F(1, 274) = 0.77$, $p = .382$, $\eta_{\text{partial}} = .003$; saturation, $F(1, 274) = 0.54$, $p = .465$, $\eta_{\text{partial}} = .002$; nor on distancing, $F(1, 274) = 2.81$, $p = .095$, $\eta^2_{\text{partial}} = .010$.

Experiences of parenting in lockdown: Thematic analysis

Of the 403 parents completing the survey, 179 indicated that their responses had been at least somewhat impacted by the COVID-19 restrictions, whereas 227 said that their responses had not been affected. Of those who indicated their responses had been affected, 153 provided responses to the qualitative question "Please explain how the COVID-19 situation has affected your relationship with your children and your role as a parent." Please note participant responses provided below from the online survey have been included here exactly as written. Three themes were evident in the data: sources of stress, loss of coping mechanisms, and consequences of parenting in lockdown. For parents in our sample, the COVID-19 restrictions brought additional sources of stress, while simultaneously removing coping mechanisms. For many in our sample, this had negative consequences, affecting parents and their children's emotions and behaviors. A list of themes and subthemes captured by the analysis is available in Table 3.

Sources of stress

Parents in this sample reported several sources of stress during the COVID-19 lockdown. These fell under six main categories: homeschooling, juggling multiple responsibilities, spending too much time together, financial strain and concerns about work, concerns about mental health, and concerns about contracting COVID-19. The most common source of stress for parents in this sample was the requirement to homeschool their children. Parents described homeschooling as "hard," "difficult," and "draining." Parents with more than one child reported the difficulties associated with balancing the needs of multiple children, including trying to homeschool while taking care of younger children. For some parents, the structure provided by the school

TABLE 3 Frequencies and percentages of themes

Theme	<i>n</i> (%)
Stressors	
Homeschooling	38 (24.8)
Juggling multiple responsibilities	30 (19.6)
Too much time together	21 (13.7)
Financial strain and concerns about work	18 (11.8)
Mental health concerns	15 (9.8)
Concern about falling ill	5 (3.3)
Loss of coping mechanisms	
Loss of “me time”	29 (19.0)
Harder to entertain	19 (12.4)
Loss of social networks	10 (6.5)
Loss of support networks	7 (4.6)
Consequences of parenting in lockdown	
Negative emotions	28 (18.3)
Negative behavior	15 (9.8)
Better quality time together	25 (16.3)
Slower pace of life	11 (7.2)

Note: As participants' responses may fall across more than one code, this will not sum to 100. A further nine participants (5.9%) provided responses that did not fall under one of the key themes. These have not been captured in the analysis as they did not have rich evidence in the data.

exacerbated the difficulties of homeschooling: “Trying to homeschool children of different needs and keeping to the school’s set timetable was very stressful” (Mother of two).

For parents, there was a cost to the impossible balance of homeschooling and other responsibilities. The primary cost was to the parents’ own time to rejuvenate, some parents reported relinquishing responsibilities such as dropping out of university study to cope with the demands of homeschooling. For some parents the cost was emotional, with some reporting a feeling of failing their children, and subsequent feelings of guilt: “Feeling of guilt not being able to help them with school” (Mother of two). Parents also reported that their children struggled with homeschooling, particularly regarding motivation to stay on task. For parents, this provided an additional source of stress attributable to the added mental load associated with trying to motivate their children to learn. For instance: “Recalcitrant child who has no interest in education or self direction. Just wants to have fun & mess around. ... Having to be punitive to get things done.” (Mother of one). In addition to the stressors associated with homeschooling, parents reported that they were dealing with multiple, often competing responsibilities associated with keeping their children at home. This was primarily resulting from the requirement to work from home, while also teaching their children, but also maintaining housework, or completing study. Parents reported the struggle of balancing these multiple responsibilities. For instance: “School and after school care being shut has meant we are spread too thin in our roles in balancing parenting, work and the rest of our life” (Mother of two).

Parents described not only challenges in juggling their regular commitments, but also reported that the COVID-19 restrictions came with additional expectations on their role as a parent, which did not exist to the same extent pre-pandemic. In the words of this mother of two school-aged children:

During this 2-month covid time, I was with the kids 24/7 and also part time working while homeschooling the boys. So I went from being a mum to mum, cook, teacher, disciplinarian, play mate, exercise buddy, referee, creative arts provider, laundromat, home tidier ALL the time. We all didn't enjoy me having so many hats on at once. (Mother of two)

For parents, these additional responsibilities, and the juggle between multiple competing responsibilities, came at a cost to their mental health, which manifested as anger toward the children. For instance, this mother of five children described her difficulties with trying to homeschool several children, while still meeting her other responsibilities:

I feel like trying to homeschool them (4 [children]) and raise a baby is a lot on my plate I am a student (masters degree) and housewife. Having one child in year 7 and one in prep is very time consuming I find I'm getting very frustrated because I can't share my time and do the things I want and need to do with each child this makes me frustrated and angry at myself and I end up taking that frustration out in my kids in the sense of yelling and screaming. (Mother of five)

Parents also described situations where they felt their families were spending too much time together and reported being unable to get time apart from one another. In Australia during periods of COVID-19 restrictions, it became illegal to leave the house without a valid reason, and heavy penalties applied for those that broke these laws. The acceptable reasons were extremely limited, and in some jurisdictions army and police patrolled the streets to ensure compliance. This left families with a limited ability to physically extricate themselves from each other. Parents talked about "being stuck inside" and having "cabin fever," which speaks to the physical confines of their situation, but most prominent was a sense that family members were unable to escape one another. For some, the limited boundaries of their physical space were intrinsically tied to an inability to escape from one another. In the words of this participant: "It has been difficult living together in a small house with 5 people. We have all felt each other's presence so insistently and have often at times struggled to have some much needed time out." (Mother of three). This inability to take a break from one another became stressful. Parents described the tension and stress associated with spending too much time together: "We are in constant interaction. My kids have never spent so much time together, 7 days a week—no break from each other. It's stressful. Like the last few days of a holiday and you all just need some space." (Mother of two).

In addition to stressors within the family, parents were also dealing with added stressors attributable to changes in their work roles resulting from COVID-19. In our sample, the quantitative data revealed 4.5% of parents were furloughed because of the COVID-19 lockdown, however parents also reported the loss of a partner's job in the qualitative data. For this mother, being furloughed resulted in uncertainty about the future and heightened anxiety around providing for her family: "Financial aspect of it is challenging my moods, the stress of not being able to give them as much and me always being worried about the future" (Mother of two). For parents who did not lose their job, some reported that they felt concern about the potential for future job losses. Further, even for parents who had maintained their jobs throughout the lockdown, working from home came with its own unique challenges, including increased pressure at work while balancing additional responsibilities at home, leaving less time to complete work tasks. Although parents reported that the loss of commute time associated with going into the office was a benefit, for some parents the challenges associated with working from home resulted in an increase in stress. For instance: "Higher stress levels working from home" (Mother of one). Parents who were "essential workers" were still permitted to physically attend work. In Australia, these jobs were limited, but included health professionals, emergency

services, tradespeople for emergency work only, and those in the provision of food services such as supermarket workers or restaurant workers who were able to operate for take away only. For many of these workers, the requirement to attend work and subject themselves to potentially falling ill resulted in additional stress. In the words of this mother of five children: “I am still working full time as a front line worker—the extra stress that has been in place due to immunocompromised children” (Mother of five).

However, perhaps surprisingly given the health implications of contracting COVID-19, health concerns were not strongly reflected in participant’s responses, with only 3.3% of participants’ comments on concerns for physical health. However, for those families who did express concern about falling ill with COVID-19, they also reported that it was a source of anxiety: “Health issues make me more vulnerable and this increases anxiety” (Mother of two). For this mother of two children, concern about the virus led to not only stress but also increased anger within the family unit: “Worry about the virus also leads to increase in stress and tempers are quicker to rise” (Mother of two).

Much more common were mental health concerns. Parents reported being concerned for their own mental health and that of their children. Parents reported that the restrictions had both caused mental health issues in themselves and their children, as well as exacerbated preexisting issues. For instance: “My son calls every day with nothing to say. ... I fear for his mental state in isolation so cannot bring myself to cut the calls short” (Mother of one). Parents reported that these new or exacerbated mental health concerns had caused additional stress on them as parents and made parenting more difficult. This mother describes the impact the pandemic has had on her 8-year-old daughter: “My older child is more anxious, needing more of our support, and has been sleeping in our bed every night for the past 2 months. Exhausting.” (Mother of two).

Loss of coping mechanisms

In addition to dealing with increased stress, parents in our sample reported the effects of a loss of the usual coping mechanisms that they would rely on to alleviate stress. These included a loss of “me time,” loss of entertainment options for children, loss of social networks, and loss of support networks. Although social support and social network are used interchangeably in the literature, qualitatively, they reflected distinct categories in our data. There was a clear distinction between the loss of a social outlet for parents and children and the loss of practical support, for instance, babysitting from grandparents. This is in line with research that suggests instrumental support, goods and services, should be distinguished from “emotional” social support (Cobb, 1976).

For many parents, the loss of “me time” was also deeply felt. Before lockdown, “me time” or time away from the children was an important coping mechanism that provided time and space for parents to unwind, recharge, and de-stress. This space allowed them to return to the parental role refreshed. Parents reported this loss of “me time” resulted in greater frustration and reduction in patience. In the words of this mother: “Isolation has meant minimal ‘me’ time. It would usually allow me to work through my anxieties and unwind, but now there isn’t much chance to do that.” (Mother of two). Although parents in this sample are from dual parent households, the inability for parents to physically remove themselves from other members of the household due to the legal restrictions on leaving the house meant that parents were unable to fully relieve one another from parenting duties. For instance: “With four of us in the same space everyday, it has been hard to carve out some alone time. The expectation that I [am] always available has been hard to navigate!” (Mother of two). For this mother, the combination of homeschooling and the loss of “me time” led to adverse health behaviors: “Homeschooling and losing my own me-time was a nightmare. I started smoking again from stress.” (Mother of two).

Parents also spoke of missing sports and recreational activities that took place outside of school hours. Sports and recreational activities are essential to Australian culture and are

critical for building and maintaining support networks and prosocial behavior. Additionally, these recreation activities provide respite from the repetitiousness of day-to-day life at home and help break up the day, relieve stress, and take pressure off home life: “I’m spending more time alone at home with my child and don’t get out of the house going to activities like swim class or dance class that help break up the monotony of parenting” (Mother of one).

For some parents, the extra burden created by school closures was magnified by the loss of shared social settings that provided an opportunity to connect and socialize with friends. Parents reported not only effects on themselves, but also the effects of social isolation on their children. For instance:

It’s more tiring with less rewards (ie seeing them grasp new things at the park or make new friends. My child is now more reserved in public/at a friends house. There is less community support (ie chatting to other mums). (Mother of one)

The loss of time with friends and family was difficult for many parents. It seemed that parents experienced this loss on both an emotional and practical level. Research has shown that informal care of one’s children is distinct from formal care as it provides both practical support and emotional relief for parents. The use of informal care, such as family and friends, is associated with significantly less parenting stress when compared to formal care (Craig & Churchill, 2018). For this mother, restrictions on seeking outside help led to exhaustion: “We welcomed a newborn during covid. ... so the care of our children has fallen solely on us without outside help. So it has been an exhausting season Without help of grandparents, parks, friends and schooling.” (Mother of four).

Consequences of parenting in lockdown

For parents in this sample, there were consequences of parenting in lockdown. Of the 153 parents who provided qualitative responses, 79 (68.1%) chose to comment on how the lockdown had affected them and their family. Of these, 43 (54.4%) reported negative emotional or behavioral consequences as a result of the lockdown. Most predominantly, participants reported being “exhausted” and “frustrated” resulting from stressors associated with the lockdown, but some also described feelings of guilt for not being able to give sufficient attention to their children. Many parents talked about a loss of patience during this time, often resulting from an inability to carve out time in the day for themselves: “Since schools are closed, more time to be allocated to my child. Less time for myself. Less time to rejuvenate. Tipping point between patience and frustration is quicker than before COVID situation.” (Father of one).

Parents also reported negative behavioral consequences as a result of the imbalance between stressors and coping mechanisms. For many parents, the frustrations associated with the stressors encountered during this period boiled over, and parents reported a lack of patience, as well as an increase in yelling or screaming at their children. For instance: “I’m yelling at them more. ... I’m more frustrated” (Mother of two). Negative emotions and behaviors were also reported in children as a consequence of increased time spent together and a self-reported overreliance on technology during the lockdown period. Several parents reported that their children were fighting more, whereas others talked about negative behavior more generally. For these parents, the negative behaviors in their children had carry-over effects on the families, with parents reporting that the additional challenge of managing these behaviors in their children made parenting more difficult. For instance: “My toddler is restless, bored and its super hard to entertain him. He is lonely and frustrated. If he is unhappy, everyone is unhappy in the family.” (Mother of one).

Across the board, lockdowns affected the family dynamic. For many this shift was negative, but for some the lockdown had changed the family dynamic for the better. For instance, one

mother described improved coparenting arrangements with her husband as a result of working from home arrangements. Almost half (45.6%) of parents who commented on the consequences of lockdown reported positive outcomes of the restrictions. Those that provided positive responses often noted that the lockdowns allowed families to reconnect, or to strengthen existing connections. For instance: “We spend more time together, so are more connected, intertwined at the moment” (Mother of three). Although some parents reported that the cancellation of extracurricular activities had made parenting harder, which they attributed to a loss of routine, others reported that these cancellations had allowed them to spend more time together. Parents also reported the removal of the daily commute had enabled them to enjoy a slower pace of life and spend better quality time together: “It gives us more opportunity to spend that little bit more time with a bit more energy that travel [to and from work and school] used to take it away” (Mother of two). For these parents, the COVID-19 restrictions and the subsequent ability to spend time together made their family bonds stronger: “It has made our relationship stronger and the time together went better than I expected. We were able to slow down and connect more without lot of external distractions.” (Mother of three).

DISCUSSION

The aim of this paper was to investigate the impact of the COVID-19 pandemic on Australian parents. First, predictors of PB were examined in a sample of parents during COVID-19 in Australia. Second, we compared the PB scores of these parents with a sample of parents collected prior to the COVID-19 pandemic. Third, thematic analysis was used to understand the experience of parenting during the COVID-19 restrictions.

As expected, parent’s age was a small, but a significant, predictor of global PB, as well as the exhaustion and contrast subscales. This is consistent with earlier studies (Johnson et al., 2021; Kawamoto et al., 2018; Sorkkila & Aunola, 2020), and indicates that younger parents have an overall vulnerability to burnout. There are several possible explanations for this finding. First, younger parents may experience greater conflict between the need for freedom and the commitments of family life than older parents, who may be readier to settle down (Sorkkila & Aunola, 2020). Younger parents may feel more tied down or restricted by their parental role and become frustrated when parental responsibilities prevent the attainment of personal goals and desires. This makes sense, as parental role restriction is a risk factor for PB (Mikolajczak, Raes, et al., 2018). Also, younger parents may have less parental experience in nurturing younger children who require more care (Johnson et al., 2020).

There was a significant association between gender, average age of children, number of children, and the exhaustion subscale only. The relationship between gender and exhaustion is in line with previous findings, which found that mothers reported greater levels of burnout than fathers (Aguiar et al., 2021; Marchetti et al., 2020; Roskam & Mikolajczak, 2020; Sorkkila & Aunola, 2020). This gender difference may be exacerbated by COVID-19, as although the domestic burden increased for Australian men, Australian women have carried a greater share of the increased domestic workload created by lockdown measures and homeschooling (ABS, 2021; Craig & Churchill, 2021; Hand et al., 2020). This is consistent with data from an Italian sample, which found that mothers experienced greater parental exhaustion during COVID-19 compared to fathers (Marchetti et al., 2020). The authors suggest this may be because mothers are subject to greater conflict between paid work and unpaid home responsibilities. This view has been echoed by numerous researchers who have found that women suffer from greater work–family conflict (Johnson et al., 2020). Further, mothers are also more likely to subscribe to socially prescribed and self-oriented perfectionism than fathers (Henderson et al., 2016; Sorkkila & Aunola, 2020), which is a risk factor for burnout (Sorkkila & Aunola, 2020; see also Kawamoto et al., 2018). The findings that those with more children or younger children

experience greater exhaustion is accordant with previous research (Kawamoto et al., 2018; Mikolajczak, Raes, et al., 2018). These parents may experience greater exhaustion due to the increased demands that additional or younger children can bring. Furthermore, larger families experience greater levels of disorganization, which is a risk factor for PB (Kawamoto et al., 2018; Mikolajczak, Raes, et al., 2018; Whitesell et al., 2015). It is reasonable to postulate that during periods of restrictions when parents and children are forced to work in the same space, it may be difficult to maintain order; therefore, family disorganization and chaos are increased. Results also indicated that parents with a greater number of children at home had higher scores on the contrast subscale of the PBA, indicating that they feel they are not the parent they once were. This is consistent with findings from a study across multiple African countries, although they also found an overall effect on PBA total score, which was not replicated in this study (Sodi et al., 2020). It is reasonable to assume that having a greater number of children would intensify the parental workload, generate additional stressors, and increase demands on time. As such, it is possible that having more children to care for leads to a larger discrepancy between actual parental self and the parent they previously were or envisioned they would be, leading to greater reports of contrast with previous self. This experience may be heightened during periods of COVID-19 restrictions when external support has been removed. Research in this area has, until recently, focused on PBA total score and an examination of these variables at the subscale level is in its infancy.

It must be noted that the effect sizes of all sociodemographic variables were small, indicating that although these factors are significant predictors of PB, there are other, more important factors that have not been measured. This is consistent with research internationally, which suggests that psychological traits of the parents such as personality, as well as environmental factors may play a bigger role in PB (Mikolajczak, Raes, et al., 2018; Roskam et al., 2018a). However, there is still a need for an exploration of the antecedents of PB in an Australian context, given that PB has been shown to be culture dependent (Roskam et al., 2021; Sorkkila & Aunola, 2020). It is possible that the unique combination of sociodemographic factors and cultural values in Australian parents might influence the development of PB, as has been shown in other areas of parenting research (Haslam et al., 2020). For instance, Australia possesses one of the world's highest immigration rates, with 30% of its population born overseas, which disrupts intergenerational and social support shown to be a protective factor for PB (Parkes et al., 2015). Further, Australia has lower levels of gender equality than the European countries where PB has been explored thus far, and, in line with social learning theory (Bandura, 1977) and social role theory (Eagly et al., 2000), societal levels of gender equality have been predicted to affect the impact of demands and resources on the development of PB in fathers and mothers (Roskam & Mikolajczak, 2020). As expected, global PB scores obtained during COVID-19 restrictions were significantly higher than those obtained before the COVID-19 pandemic. This was driven by significantly higher scores on the exhaustion subscales, indicating that the COVID-19 lockdowns had increased exhaustion in parents. This is also supported by the qualitative data, with participants using words like "exhausted" and "tiring" when describing their experiences.

Interestingly, there was no difference between the pre-COVID-19 and during COVID-19 parents on the subscales of contrast with previous parental self, saturation, and distance. One explanation may be the chronological nature of burnout, with burnout beginning with exhaustion and progressing through the subsequent dimensions (Hansotte et al., 2021). The authors argue that parents start off by becoming exhausted, leaving them at risk of PB if exhaustion worsens, then parents begin to conserve their resources by emotionally distancing themselves from their children. Finally, they disengage from their parental role, now burned-out parents. Given that our data were collected relatively early in the pandemic, it is possible that many of our parents were in the early stages of burnout. However, more work is needed to test this hypothesis and understand each dimension's role in the onset and maintenance of PB (Blanchard et al., 2021).

Notably, there are similarities between results of the present study and a Portuguese study, where parents had higher scores in global burnout, exhaustion, contrast, and emotional distancing during COVID-19 restrictions than prior to these restrictions (Aguiar et al., 2021). However, these findings stand in contrast to a French study, which found only a slightly significant difference in the global burnout score, mainly stemming from differences in saturation or a loss of pleasure in parenting (Le Vigouroux et al., 2022), and not increases in the exhaustion and contrast subscales. These disparities may stem from cultural differences, which shape parenting attitudes and expectations (Bornstein et al., 2011) which may be differentially affected by COVID-19 restrictions or may be attributed to differences in governments' responses to the COVID-19 crisis. Indeed, differences in government response, such as the amount of support parents receive from the government or their community, have been shown to impact parental well-being (Szczygieł et al., 2020). For example, the governmental provision of local and national policies to improve contextual issues affecting parents and the implementation of parenting programs are essential factors in supporting parental well-being (Moran et al., 2004). These factors may be crucial during lockdown when family support is reduced.

Qualitatively, parents in our sample reported increases in stressors resulting from COVID-19 restrictions. For instance, participants reported homeschooling, juggling multiple responsibilities, spending too much time together, financial and work stress, and concerns about mental and physical health. Parents also reported the removal of coping mechanisms that would enable them to cope with these stressors. Parents in our sample talked about a loss of "me time," indicating that they were finding it harder to take a break from their family. They reported that they found it harder to entertain their children, as well as a loss of social and support networks. For parents in our sample, this combination of increased stress along with a reduction in coping mechanisms resulted in exhaustion and frustration, which led to a lack of patience and anger at their children. These findings fit with previous qualitative research (Evans et al., 2020; Hand et al., 2020), which reported similar experiences of stressors and loss of respite during the COVID-19 pandemic. Further, these qualitative data also fit with the existing quantitative research in burnout, which suggests that burnout occurs when parenting stress overwhelms a parent's resources to cope (Mikolajczak & Roskam, 2018). The expression of exhaustion as anger, described by the parents in our study, is consistent previous research, which found that parental exhaustion predicted greater experiences of anger, and contrast predicted greater experiences and expressions of anger (Prikhidko & Swank, 2020). Importantly though, around a quarter of our sample reported that the COVID-19 lockdowns had brought them closer as a family, and the removal of extracurricular activities and commute time had allowed them to enjoy a slower pace of life. This dichotomy between positive and negative consequences of COVID-19 restrictions in our sample also fit with experiences described by Evans et al. (2020). Additionally, it should be acknowledged that qualitative items were offered only to participants who indicated their answers had been affected by COVID-19 and 55% of participants felt that restrictions had not influenced their responses. Collectively, these findings suggest that the restrictions brought on by COVID-19 affect families differently, and although some parents will benefit from additional supports, this is not universal.

Limitations and directions for future research

This is the first study to compare pre-COVID-19 burnout scores to scores obtained during COVID-19 within Australia. Understanding PB within an Australian context is essential, given that parenting occurs in a social and cultural context (Bornstein et al., 2011), and recent findings suggest burnout is culturally dependent (Roskam et al., 2021). This study also benefits from its mixed-methods approach, with the ability to triangulate between the qualitative and quantitative data.

Although this study has provided insight into the experience of parenting during COVID-19 restrictions, several limitations should be addressed. First, data were collected early in the COVID-19 pandemic. Within Australia, depending on location, there have been several periods of lockdown. In September 2021, the second biggest city in Australia, Melbourne, surpassed Buenos Aires as the most days spent in lockdown in the world, at 235 days. Therefore, more comprehensive longitudinal studies that examine the experiences and consequences of periods of prolonged lockdown are required. Second, parents in this study may have been under different levels of restrictions when completing the study survey depending on the date of completion and in which state or territory they reside. Therefore, these findings may lack a nuanced view of COVID-19 restrictions. Third, although the pre-COVID-19 and during COVID-19 samples shared similar characteristics, the data compared in this study were collected from two different samples of Australian parents. Although it is unlikely that the results can be explained by differences in the sample, further research is needed that employs a true longitudinal design. Fourth, as the data were collected as part of a wider project on PB and relationship satisfaction, single parents were underrepresented in this study. It is unclear how the paucity of single parents may have impacted the results in the current study, as data from single parents have produced inconsistent findings. For example, Mikolajczak, Raes, et al. (2018) found no difference in average PB scores between single parents and parents with a spouse, whereas Lebert-Charron et al., (2018) indicate that being a single parent is a protective factor. Still others suggest that being a single parent is a risk factor (Mikolajczak & Roskam, 2018; Sorkkila & Aunola, 2020; Szczygiel et al., 2020). These inconsistencies may arise as a consequence to the heterogeneous nature of single parenthood. Roskam et al. (2018a) found that parents who were single by choice had a lower average PB score than parents with a partner. However, burdened single parents (those who did not choose to be single) scored higher on burnout than parents with a partner. More research is needed in the area, particularly in the context of COVID-19 as it eliminates other avenues of support for parents. A final limitation of this study is a lack of male participants. Like most studies conducted thus far in the domain of parental burnout, participants were primarily female. This may have implications as gender differences have been found to influence parental burnout (Roskam et al., 2021). This is particularly pertinent when looking at the impact of COVID-19 restrictions on PB, as Australian fathers have experienced a sharper increase in their portion of childcare and home responsibilities during the COVID-19 pandemic compared to pre-pandemic levels than mothers (Craig & Churchill, 2021), putting them at greater risk for PB.

Implications

COVID-19 restrictions and targeted lockdowns are likely to be a feature of life for the near future. Further, future pandemics are likely, given the increasing issues of dense livestock production, a loss of biodiversity, and the threat of accidental or intentional leakage from laboratories (Dodds, 2019). Therefore, it is imperative to understand the impacts pandemics and associated restrictions have on parents as part of a wider call for pandemic preparedness (Naguib et al., 2020). Of importance to practitioners is the significant increase found in exhaustion levels. Studies have demonstrated that even moderate levels of exhaustion can negatively affect the parent-child relationship (Gillis & Roskam, 2019). Exhaustion is considered the first stage of PB, during which prevention efforts are most effective (Roskam & Mikolajczak, 2021). Since PB stems from an imbalance between parental demands and the availability of resources needed to meet those demands, when working with this population it is essential that parents are educated about PB and are encouraged to identify protective factors that compensate for the increased demands placed on them by COVID-19 related lockdowns. Importantly, exhausted parents should be diagnosed and provided with treatment before exhaustion leads to

emotional distancing as it is the jump to emotional distancing that has been found to increase neglect and violence toward children (Hansotte et al., 2021). Treatment for parents suffering from burnout has shown promising results (Brianda, Roskam, et al., 2020). Psychologists trained in active listening and group therapy have been found to be effective in helping parents suffering from parental burnout by providing an empathetic avenue to discuss issues that pertain to this condition. The results from this study add to a growing body of literature that suggests that parental well-being should be considered when formulating a response to a pandemic outbreak, as support for families is needed to address PB.

Conclusion

Findings from this study indicate that there has been a rise in both the levels and prevalence of PB in Australia, stemming from increases in parental exhaustion since the arrival of the COVID-19 pandemic. Parent age and gender, average age of children, and the number of children at home were identified as significant predictors of PB. In addition, thematic analyses revealed that parents reported an increase in stressors and a loss of coping mechanisms during lockdown, resulting in feelings of anger and frustration. These results suggest, for the most part, parents struggled to cope with the additional burden of responsibility and loss of resources created by COVID-19 restrictions. Findings from this study support previous research by highlighting the detrimental consequences of COVID-19 restrictions on parental well-being and calling for support to combat the psychological impacts of these restrictions on families.

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