Parental Burnout Assessment (PBA)

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Abstract

The Parental Burnout Assessment (PBA) is a 23-item questionnaire measuring the four dimensions of parental burnout, i.e., emotional exhaustion, emotional distancing, feelings of being fed up, and contrast with the previous parental self. Parental burnout results from chronic imbalance between factors that increase parenting stress and resources that alleviate it. It is a serious condition as it affects 5–8% of parents in Western countries and results in parental neglect and violence toward the offspring. The PBA was developed on the basis of testimonies of distressed parents. Evidence for its content, construct, and predictive validity was found and replicated across samples. The PBA has been translated and validated in 21 languages. Clinical cutoff as well as a brief 5-item version of the PBA is also available. The PBA can be administrated online with automatic feedback or as a paper-and-pencil version. The PBA is relevant to mindfulness research that has been successfully applied to parenting, but has yet to consider parental burnout as the most severe experience of parenting.

Keywords

Stress · Exhaustion · Neglect · Violence · Parenting

Theoretical Foundations

Parental burnout belongs to the family of stress disorders and refers more specifically to an exhaustion syndrome in the parenting domain. The notion of parental burnout was coined by a US mother in the 1980s (Lanstrom, 1983), but the topic was little studied (see Pelsma, 1989) until a Swedish team working with parents of severely ill children started to study it more systematically in the 2000s (Lindhal-Norberg, 2007, 2010; Lindhal-Norberg et al., 2014; Lindstrom et al., 2010; Lindström et al., 2011). These studies provided the first evidence of the existence of parental burnout: Some parents exhibited symptoms of high burnout while not working. However, these studies all focused on parents of severely ill children and relied on a context-free measure of burnout. They therefore could not clearly distinguish parental burnout from job burnout, nor did they determine whether parents who do not have severely ill children are also vulnerable to parental burnout. In sum, these studies did not provide any indication of the validity and specificity of the concept of parental burnout, nor of its prevalence in the general population.

Motivated by both clinical observations and testimonies from distressed parents, the first studies on parental burnout in the general population were conducted in 2017 (Roskam et al., 2017) and literally boomed worldwide in the years after (e.g., Cheng et al., 2020; Matias et al., 2020; Sodi et al., 2020; Szczygieł et al., 2020). This

body of evidence (for review, see Mikolajczak et al., 2021) showed that parental burnout is relatively frequent in community samples (a point prevalence of 5%), especially in Western countries (up to 8–10%; Roskam et al., 2020). It occurs when there is a chronic imbalance between factors that increase parenting stress (e.g., perfectionism, low emotional competencies, coparenting disagreement, and children with behavioral or health problems) and resources that alleviate it (e.g., self-compassion, emotional stability, and social or partner support) (Mikolajczak & Roskam, 2018). Parental burnout typically develops in stages, starting with feelings of exhaustion, and continuing with emotional distancing from one's children and feelings of inefficacy in the parenting role, which mutually reinforce over time (Roskam & Mikolajczak, 2021).

Parental burnout is a serious disorder that warrants attention not only due to its prevalence but also due to its consequences, which appear to be even more severe than those of job burnout and depression (Mikolajczak et al., 2020). These consequences include very severe dysregulation of the bodily stress system (Brianda et al., 2020c) and frequent suicidal ideations (Mikolajczak et al., 2019). Children are not spared, as parental burnout dramatically increases parental neglect and violence (Mikolajczak et al., 2018a; Mikolajczak et al., 2019). All these effects normalize when the symptoms of parental burnout are treated (Brianda et al., 2020b).

Parental Burnout and Mindfulness

Although it is still in its infancy, the literature has reported evidence of a significant negative relationship between mindfulness and self-compassion, on the one hand, and parental burnout, on the other (Gerber et al., 2021; Paucsik et al., 2021). Interestingly, a mindfulness-based program (MBP) for parents of children with chronic illness strongly reduced parents' level of exhaustion (Anclair et al., 2018). Indeed, several processes involved in the practice of mindfulness and self-compassion seem to be particularly relevant for the treatment of PB, as they compete with dysfunctional processes that increase the risk of PB. For example, mindfulness may help parents who face uncontrollable stressors (e.g., having a chronically ill child) to accept their situation and therefore reduce their daily stress level (Lindström et al., 2011). While struggling with or attempting to conceal a difficult situation (e.g., an ill or disabled child) will exacerbate the stress level, meeting the challenge head-on – starting with frankly acknowledging its characteristics and effects – may lower stress and facilitate adaptation. Self-compassion, for its part, reduces the self-criticism and the feelings of shame and guilt (Gilbert & Procter, 2006) that are prominent in PB (Hubert & Aujoulat, 2018; Sánchez-Rodríguez et al., 2019; Sejourne et al., 2018). Through the development of unconditional positive regard, self-compassion enhances self-image, which is fundamental to the therapeutic process. The belief that one has the ability to be a "good parent" – also known as parental self-efficacy beliefs – plays a key role in positive childrearing practices and satisfaction in one's parental role (Meunier & Roskam, 2009; Mikolajczak et al., 2018b).

However, recent data suggest the need for cautiousness in the use of mindfulness practice in PB treatment. In their recent randomized controlled trial, Bayot et al. (n.d.) tested the effectiveness of a group mindfulness and compassion-based approach (MCA) (N = 40) for PB symptom reduction, in comparison with a validated group treatment (N = 37) (Brianda et al., 2020b). In line with previously reported findings, the MCA led to a positive change of nearly 30% in parents' burnout symptoms and a similar reduction in violence toward their child(ren). However, individual data analysis also revealed that the intervention had a deleterious effect on some parents: 21% of participants from the MCA condition reported heightened PB levels at posttest (versus 5% from the comparison group). Comparing individuals who benefited from the MCA with individuals who experienced deterioration, the authors found that the latter had significantly higher baseline levels of fearful temperament (characterized by feelings of insecurity and panic responses).

This preliminary result indicates the need for reflection on the way mindfulness practices are proposed to burnt-out parents. Although mindfulness training may address core dysfunctional processes within burnout, it may not be appropriate for everyone or at every phase of the syndrome. In line with other MBPs (e.g., depression relapse prevention; Segal et al., 2002), the MCA may be most appropriate when parents have partially overcome their distress and recovered a feeling of "safety" within themselves (i.e., who have accessed their soothing-affect systems; Gilbert & Procter, 2006), in order for meditation practice not to be too distressing or overwhelming. Importantly, Bayot et al. (revised) nuance their results by highlighting the fact that, in contrast with the pattern in most studies of MBPs, participants in the MCA condition did not initially choose mindfulness as a treatment method; participants who were wary of meditation may have been surprised by and rejected the idea of using it, and this may have impeded their therapeutic process. In conclusion, mindfulness and self-compassion development seem to be beneficial for a proportion of burnt-out parents, but more research is needed to identify their profile, as well as that of individuals who respond negatively to such an approach.

Description of Development and Initial Validation of the Scale

Item Generation Process

Before the development of the measure presented in this chapter, the Parental Burnout Assessment, another measure of parental burnout, the Parental Burnout Inventory (PBI, Roskam et al., 2017), had been developed from the Maslach Burnout Inventory© (Maslach et al., 1986) using a deductive approach. The PBI encompassed three factors: exhaustion in one's parental role, emotional distancing from one's children (replacing the depersonalization factor used in job burnout), and loss of parental efficacy and accomplishment. Yet, it remained unclear whether this tridimensional structure was the best representation of the parental burnout construct. The possibility could not be excluded that other dimensions ought to be added, which would change the structure and definition of parental burnout (Roskam

et al., 2017). A step forward in the conceptualization and measurement of parental burnout consisted in the use of an inductive approach: Parents in burnout were interviewed, and a list of 50 items was produced based on their testimonies (Roskam et al., 2018).

Item Selection Criteria

The list of 50 items reflecting burnt-out parents' experience was submitted via an online survey to 901 French- and English-speaking parents. A 7-point frequency scale from 0 to 6 (never, a few times a year, once a month or less, a few times a month, once a week, a few times a week, and every day) was provided after each item. For the purpose of factor analyses, the sample was split into two subsamples of 450 and 451 participants, respectively, in order to conduct exploratory factor analyses (EFAs) and confirmatory factor analyses (CFAs) on two different samples. The 901 subjects were randomly assigned to one of the two subsamples, which were checked for comparability.

A first EFA using maximum likelihood estimation with Varimax rotation was conducted on the 50 items. Based on parallel analyses, four factors were retained, which together explained 54.48% of the variance. Items were selected on the basis of several criteria: (1) Items with evident cross-loadings across three factors or more (>0.30) were removed; (2) items with the highest loading on the fifth or sixth factor were ignored; (3) in case of redundancy, only one of the two items was kept; and (4) items with meaning that could be interpreted outside the scope of parental burnout were deleted (e.g., *My children are a source of anxiety*). This resulted in a list of 23 items (Roskam et al., 2018).

EFA and CFA Validation

A second EFA was conducted on the 23 selected items. The four-factor structure accounted for 66.59% of the variance. Based on items' meaning, the first dimension was labeled "exhaustion in one's parental role," the second one "contrast with previous parental self," the third one "feelings of being fed up," and the fourth one "emotional distancing from one's children." Standardized factor loadings ranged between 0.40 and 0.82. Four cross-loadings (>0.40) were reported: one Contrast item (CO6) cross-loading on Exhaustion (0.45); one Feelings of Being Fed Up item (FU4) cross-loading on Exhaustion (0.42); and Contrast (0.40); and one Emotional Distancing item (ED2) cross-loading on Feelings of Being Fed Up (0.46) (see Table 1).

For the CFA, the measurement model included four latent variables representing the concepts of exhaustion (9 items), contrast with previous parental self (6 items), feelings of being fed up (5 items), and emotional distancing (3 items). Analyses were conducted using maximum likelihood estimation. Several goodness-of-fit indices were used to determine the acceptability of the models, i.e., the root mean square

Table 1 Loading parameter estimates in EFA from the four-factor solution and reliability estimates for the 23-item version of the PBA in subsample 1 (n = 451) and standardized regression weights from CFA and reliability estimates for the final 23-item version of the PBA in subsample 2 (n = 450)

		EFA				CFA			
		EX	CO	FU	ED	EX	CO	FU	ED
EX1	I feel completely run down by my role as a parent	**0.82**	0.25	0.291	−0.061	0.84			
EX2	I have the sense that I am really worn out as a parent	**0.78**	0.32	0.176	0.119	0.86			
EX3	I am so tired out by my role as a parent that sleeping does not seem like enough	**0.73**	0.13	0.068	−0.031	0.70			
EX4	When I get up in the morning and have to face another day with my child(ren), I feel exhausted before I have even started	**0.72**	0.23	0.206	0.287	0.82			
EX5	I find it exhausting just thinking of everything I have to do for my child(ren)	**0.66**	0.21	0.165	0.317	0.75			
EX6	I have zero energy for looking after my child(ren)	**0.66**	0.33	0.333	0.091	0.80			
EX7	My role as a parent uses up all my resources	**0.64**	0.18	0.277	0.316	0.80			
EX8	I sometimes have the impression that I am looking after my child (ren) on autopilot	**0.55**	0.31	0.165	0.348	0.71			
EX9	I am in survival mode in my role as a parent	**0.54**	0.28	0.371	0.295	0.73			

(continued)

Table 1 (continued)

		EFA				CFA			
		EX	CO	FU	ED	EX	CO	FU	ED
CO1	I do not think I am the good father/mother that I used to be to my child(ren)	0.32	**0.76**	0.212	0.050		0.83		
CO2	I tell myself that I am no longer the parent I used to be	0.28	**0.75**	0.259	0.237		0.85		
CO3	I am ashamed of the parent that I have become	0.24	**0.71**	0.306	0.218		0.88		
CO4	I am no longer proud of myself as a parent	0.26	**0.70**	0.257	0.282		0.88		
CO5	I have the impression that I am not myself any more when I am interacting with my child (ren)	0.29	**0.68**	0.298	0.289		0.83		
CO6	I feel as though I have lost my direction as a dad/mum	**0.45**	**0.63**	0.307	0.014		0.78		
FU1	I cannot stand my role as father/ mother any more	0.19	0.17	**0.824**	0.129			0.81	
FU2	I cannot take being a parent any more	0.19	0.27	**0.747**	0.223			0.83	
FU3	I feel like I cannot take any more as a parent	0.29	0.29	**0.689**	0.134			0.83	
FU4	I feel like I cannot cope as a parent	**0.42**	**0.40**	**0.636**	0.074			0.86	
FU5	I do not enjoy being with my child(ren)	0.23	0.31	**0.560**	0.276			0.75	
ED1	I do what I am supposed to do for my child (ren), but nothing more	0.23	0.31	0.364	**0.542**				0.69

(continued)

Table 1 (continued)

		EFA				CFA			
		EX	CO	FU	ED	EX	CO	FU	ED
ED2	Outside the usual routines (lifts in the car, bedtime, and meals), I am no longer able to make an effort for my child(ren)	0.26	0.37	**0.462**	**0.505**				0.84
ED3	I am no longer able to show my child(ren) how much I love them	0.076	0.385	0.379	**0.412**				0.72
	α	0.93	0.93	0.90	0.81	0.93	0.94	0.91	0.77

Note Factor loadings in EFA > |0.40| are in bold; *EX* Exhaustion in parental role, *CO* Contrast in parental self, *FU* Feelings of being fed up, and *ED* Emotional distancing.

error of approximation (RMSEA), the standardized root mean square residual (SRMS), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). All the estimated factor loadings found in the CFA were significant at $p < 0.001$. Standardized factor loadings ranged between 0.69 and 0.88. Correlations between the four factors were 0.76 (exhaustion-contrast with previous parental self), 0.76 (exhaustion-feelings of being fed up), 0.66 (exhaustion-emotional distancing), 0.78 (contrast with previous parental self-feelings of being fed up), 0.76 (contrast with previous parental self-emotional distancing), and 0.79 (feelings of being fed up – emotional distancing). With regard to fit indices, they demonstrated a very good fit to the data, with CFI = 0.94, TLI = 0.93, RMSEA = 0.07, and SRMR = 0.04. These results confirmed the validity of the four-factor internal structure of the PBA. The results of the second EFA ($n = 451$) and the CFA ($n = 450$) are presented in Table 1.

Reliability

Reliability was estimated with Cronbach's alpha coefficients (α). As displayed in Table 1, reliability was high, ranging from 0.81 to 0.93 in subsample 1 ($n = 451$), and from 0.77 to 0.94 in subsample 2 ($n = 450$). The lowest values (<0.90) were obtained for Emotional Distancing in the two subsamples, which was most likely due to the limited number of items in this subscale.

Construct Validity

In the initial validation of the scale (Roskam et al., 2018), construct validity was first estimated by correlating the scores obtained by the participants with both the PBA and the PBI. Coefficients between the two exhaustion factors were high, $r = 0.86$

and *tau* = 0.67, and the same was true for Emotional Distancing, $r = 0.80$ and *tau* = 0.60, and for the global scores, $r = 0.84$ and *tau* = 0.64, further confirming the good construct validity of the PBA. The Feelings of Being Fed Up and the Contrast with Previous Parental Self factors were moderately correlated to the three PBI dimensions, with *r* ranging from 0.23 to 0.67, and *tau* ranging from 0.25 to 0.60. These results suggest that the two factors constitute dimensions specifically drawn from the inductive method which had not been fully identified by the deductive method inspired by the job burnout framework.

Construct validity was then estimated by correlating the PBA scores with demographic variables, coparenting disagreement, family disorganization, neuroticism, and job burnout. Based on previous findings with the PBI (Roskam et al., 2017), we expected to replicate low correlations with demographic variables but moderate one with the other measures. The associations with sociodemographic variables (i.e., age, educational level, and number of children) were low, *r* from 0.01 to 0.14. But the association between the PBA and other measures were higher, with $r = 0.47$ for neuroticism, $r = 0.22$ for coparenting disagreement, $r = 0.53$ for family disorganization, and $r = 0.42$ for job burnout. Since the initial validation of the PBA in 2018, numerous studies have also replicated the low correlations between parental burnout and sociodemographic characteristics (e.g., Arikan et al., 2020; Gannagé et al., 2020; Mikolajczak et al., 2018b; Sodi et al., 2020; Vigouroux & Scola, 2018), and numerous studies have supported the construct validity of the PBA (e.g., Furutani et al., 2020; Kerr et al., 2021; Sorkkila & Aunola, 2020; Szczygieł et al., 2020).

Subsequent Evidence of Psychometric Properties

Validation in Different Populations

The PBA was validated among mothers and fathers. In particular, measurement invariance was tested across sex. Such validation was required for at least two reasons, the first being conceptual and the second methodological. First, fathers and mothers' experiences of parenting may be different. Recent decades have seen important changes in favor of gender equality, which have resulted in increasing involvement of fathers in childcare and education. Nonetheless, parenthood remains the most gender-typed social role in adulthood (Koivunen et al., 2009; Nentwich, 2008). Mothers are still the primary parent in charge of children's lives (Renk et al., 2003). Second, the items of the PBA were generated on the basis of mothers' testimonies. As a result, the items might reflect the experiences of mothers more than fathers.

In order to estimate factorial invariance (including metric and scalar invariance) of the PBA across sexes (Roskam et al., 2021a), a set of nested models was implemented with gradually increasing parameters and constraints using a stepwise multiple group confirmatory factor analysis or MG-CFA. In the first step, the parental burnout model was tested for configural invariance as the basic level of measurement invariance. In the second step, the item factor loadings were estimated

Table 2 Measurement invariance of the parental burnout assessment across sexes

Model	*S-B*χ^2 *(df)*	RMSEA	CFI	Δ *S-B*χ^2*(Δ df)*	ΔRMSEA	ΔCFI
Baseline	14899.43 (444)	0.062	0.992			
Metric	17671.10 (452)	0.067	0.990	2771.67 (8)	0.005	0.002
Scalar	27570.08 (475)	0.082	0.984	9898.98 (23)	0.015	0.006
Error	31879.86 (498)	0.086	0.982	4309.78 (23)	0.004	0.002

Note. The baseline invariance model tests the equivalence form of all the relationships by imposing configural invariance, i.e., the same indicators loading on the latent variables for each group. The metric model is a model where only the factor loadings are equal across groups but the intercepts are allowed to differ between groups. This is called metric invariance and tests whether respondents across groups attribute the same meaning to the latent construct under study. The scalar model is a model where the loadings and intercepts are constrained to be equal. This is called scalar invariance and implies that the meaning of the construct (the factor loadings) and the levels of the underlying items (intercepts) are equal in both groups. The error model is the most restrictive invariance measurement. This is achieved when both loadings and the error variances are invariant across groups. It is considered the ideal level. *S-B*χ^2 is Satorra-Bentler chi square

in a metric invariance model. In the third step, scalar invariance was tested with the intercepts set as equal across groups. Finally, the invariance of measurement errors was tested for a model in which all error variances were constrained to be equal across groups. For measurement invariance, a criterion of a − 0.01 change in CFI, paired with a change in RMSEA of 0.015, was applied (Cheung & Rensvold, 2002; Rutkowski & Svetina, 2014). As shown in Table 2, adequate model fit indices, ΔRMSEA and ΔCFI, indicated the same number and pattern of dimensions across sex. Metric and scalar invariances were supported as well, and measurement errors in item responses were also equivalent across sex.

Short Forms: Validation and Psychometric Properties

The short form of the PBA, called the Brief Parental Burnout scale (BPBs, Aunola et al., 2021), has been developed. The BPBs can be thought of as a screening tool for parental burnout which aims to detect both burnt-out parents and those at risk of burnout for use by health care services. The development and validation of the BPBs took place on the basis of three studies conducted on three independent samples ($n_1 = 1725$ Finnish parents; $n_2 = 1088$ Finnish parents; and $n_3 = 104$ Belgian parents). Item Response Theory Graded Response Model (GRM) analyses with the maximum likelihood robust (MLR) estimation method were used in the first study to select 5 items from the 23 items of the PBA. Statistical and content criteria were applied so that the items would: (1) discriminate between burnt-out parents and those at burnout risk from those who were not burnt-out; (2) represent different end points of the item distribution in the region in question by demonstrating different levels of item severity; (3) be no more than 5 in number; (4) not be too personal or threatening; and (5) avoid redundancy. A new response scale was also developed that would be easier to answer. It consists in a 3-point frequency scale from 2 to 0, i.e., a) daily (the response option 6 in the original PBA), b) once or twice a week (response

options 5 and 4 in the original PBA), and c) more seldom/never (response options 3, 2, 1, and 0 in the original PBA).

The five selected items were EX8 ["I sometimes have the impression that I'm looking after my child(ren) on autopilot"], ED3 ["I'm no longer able to show my child(ren) how much I love them"], EX2 ["I have the sense that I'm really worn out as a parent"], EX3 ["I'm so tired out by my role as a parent that sleeping doesn't seem like enough"], and FU3 ["I feel like I can't take any more as a parent"]. The five items displayed both high sensitivity and specificity in screening parental burnout. In particular, burnt-out parents and those at burnout risk reported higher depressive symptoms, lower self-esteem, and more frequent sleep disruption than non-burnt-out parents. The sensitivity and specificity analyses conducted in a first study resulted in cutoff values that were optimal for both identifying burnt-out parents and limiting the frequency of false positive cases. Based on their PBA score, parents in burnout or at risk of burnout score 2 points at least once or 1 point at least twice in their answers to the BPBs. The sensitivity and specificity of the BPBs was replicated in a second and a third study. Finally, the third study confirmed the validity of the BPBs by showing correlations between parental burnout and parental neglect and violence, with a large effect size.

Contact Information for Foreign Translations

A number of foreign translations are available on www.burnoutparental.com/instruments, where they can be downloaded for free. The PBA has been translated and validated in 21 languages, i.e., Arabic, Basque, Chinese, Dutch, English, Finnish, French, German, Japanese, Persian, Polish, Portuguese, Romanian, Russian, Serbian, Spanish, Swedish, Thai, Turkish, Urdu, and Vietnamese (Roskam et al., 2021a). The list of the IIPB consortium members is provided on https://www.burnoutparental.com/international-consortium, where the name, affiliation, and email address of the researchers involved in each country can be found.

Information on How to Cite the Scale and Any Issues Regarding Copyright

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Forms of Administration (for Example, Online, Hard Copy, Group Versus Individual, and Interview)

The PBA can be administered online or as a paper-and-pencil version. Online administration with automatic feedback allows exhausted parents to self-assess their risk of parental burnout and receive personalized feedback on their PBA score. Such versions are available for free in French, Dutch, and English at https://en.burnoutparental.com/suis-je-en-burnout (select language in the top right corner of the page). The use of the paper-and-pencil version makes it possible to carry out group testing in places frequented by many parents, such as health care services, talks, or parent meetings at school, for example. The use of the paper-and-pencil version also makes it possible to reach specific populations such as low-income or low-educated parents. In this case, the administrator can read out the items and help the parent complete the questionnaire if needed.

For research purposes, the parent answers the questionnaire anonymously either online or in a paper-and-pencil version. This is an advantage since parental burnout is often associated with emotions of shame and guilt (Hubert & Aujoulat, 2018; Sánchez-Rodríguez et al., 2019; Sejourne et al., 2018). Expectations of parenting are so high that it is never easy for parents to report, for example, that they can no longer show their children how much they love them, or that they have zero energy to care for them. However, the context in which the PBA is administered, whether online or in a paper-and-pencil format during a group session or in the presence of the administrator (who may or may not be involved in reading out the items), may influence the results. Further, when a study investigates the relation between parental burnout and sensitive factors like parental neglect and violence, or escape and suicidal ideations, it may be appropriate to assess and control for social desirability (e.g., Mikolajczak et al., 2019). In a research context, it is also recommended to indicate that if the parent experiences significant discomfort after completing the questionnaire, it may be important to contact a professional. Professionals who have been trained in the diagnosis and treatment of parental burnout are listed in an updated international online directory.[1] This directory can be used not only to advise parents but also to enable networking between professionals.

In clinical settings, the PBA is mainly used either online or in a paper-and-pencil version, as a nonanonymous diagnostic tool. It is essential for a trust-based relationship to be established between the clinician and the parent so that the parent can respond to the items without feeling judged. The risk for practitioners is of underestimating the risk of parental burnout and observing false negatives. No study to date has fully estimated the influence of the mode of administration on the results of PBA, but it cannot be ruled out that it is of importance in both research and clinical settings.

[1] en.burnoutparental.com/formation

Instructions on Administration

The 23 items of the PBA are preceded by some instructions, in which it is also acknowledged that parenting is a source of fulfillment but that it can also be a source of suffering. The purpose of acknowledging this is to relieve the parent from the guilt of reporting frequent symptoms of burnout. It is recommended to use the following instructions before asking the parent to complete the PBA: *Children are an important source of fulfillment and joy for their parents. At the same time, they may also be a source of exhaustion for some parents. (This is not contradictory: Self-fulfillment and exhaustion can coexist, and it is possible to love your children, yet feel exhausted in your role as a parent.) The questionnaire below concerns the feelings of exhaustion that can be experienced as a parent. Choose the answer that best matches what you feel personally. There is no right or wrong answer. If you have never had the feeling described, choose "Never." If you have had it, indicate how often this happens by choosing the most applicable option from "A few times a year" to "Every day."*

Minimum Interval Between Administrations

Advice about intervals between administrations of the PBA should be based on empirical evidence about the temporal nature of parental burnout, in particular the stability of both the syndrome and its symptoms over time. A few longitudinal studies have been conducted on parental burnout to date. Three studies used the PBI (Gillis & Roskam, 2019; Mikolajczak et al., 2019), and two studies used the PBA (Cheng et al., 2020; Pittrowski, n.d.). Moderate to high stability was reported for parental burnout (consistently across the PBI and the PBA), with $r_{fathers} = 0.27$ and $r_{mothers} = 0.41$ with a 1-month interval (Cheng et al., 2020), $\beta = 0.80$ and $\beta = 0.78$ with a 4-month interval, $\beta = 0.80$ and $\beta = 0.78$ with a 5-month interval (Mikolajczak et al., 2019), and $r = 0.63$ with a 12-month interval (Pittrowski, n.d.). Moderate to high stability of the three dimensions of the PBI was also reported in Roskam et al. (2021b). With a 4- or 5-month interval, standardized coefficients ranged from 0.69 to 0.74 for exhaustion, 0.55 to 0.63 for emotional distancing, and 0.52 to 0.68 for feelings of inefficacy. Parental burnout must therefore be considered moderately stable. Therefore, the use of the PBA at less than one-month intervals is not recommended if intraindividual variability between measurement times is to be detected. The stability of parental burnout also needs to be controlled for in longitudinal studies, for example, when SEM models are computed.

Besides this conclusion based on statistical evidence, the repeated use of the 23 items of the PBA within a short period of time is in any case not recommended for ethical reasons. In particular, exhausted and burnt-out parents may feel uncomfortable completing the full instrument on several occasions within a short period. Researchers who wish to assess parental burnout in short time intervals should use alternative methods. An instrument to measure dynamic fluctuations of parental burnout and its main consequences has recently been developed by Blanchard and colleagues (Blanchard et al., n.d.). The authors conducted two pilot Experience

Sampling Methodology studies on a daily basis over 2 and 8 weeks, respectively. They found within-person variability, support for convergent and discriminant validity with questionnaire scores on parental burnout, depression, anxiety, and stress, high between-subject reliability and moderate within-subject reliability. Daily measurements make it possible to study the variability of parental burnout symptoms (and the circumstances and factors influencing that variability) and are complementary to the PBA (which reflects a general feeling over a longer period of time).

How to Score, Analyze, and Present the Data

The PBA subscale scores are calculated by adding the scores of all items per subscale, i.e., Emotional Exhaustion, Emotional Distancing, Feelings of Being Fed Up, and Contrast. The total PBA score is calculated by adding the score obtained on all items (min. 0; max. 138). Diagnostic thresholds are available for the PBA total score. The choice of diagnostic thresholds is always debatable. Different arbitrary criteria and cutoff scores, such as displaying at least 66.6% of the parental burnout symptoms every day, were used to identify parents showing parental burnout (Roskam et al., 2017, 2018). Recently, we used multi-informant and multimethod assessment to provide clinicians with validated cutoff scores on the PBA. By using a bundle of indicators of parental burnout, such as self-reports of parents, views of external clinical judges, and a biological measure of chronic stress (hair cortisol concentration), we ended up with the following cutoff values for PBA: Scores >86 (95% CI: 79.49–93.03) suggest that parents are suffering from parental burnout, and scores >53 (95% CI: 40.91–64.43) and < 86.26 suggest that parents are at risk of developing clinically significant levels of parental burnout (see https://osf.io/ujfb3 for more details about the preregistered analysis strategy) (Brianda et al., 2020a).

Whether the Total Score or Subscale Scores Should Be Used

The validation studies reported a good fit to the data for the second-order model encompassing the four first-order dimensions of parental burnout and a second-order dimension of parental burnout (Roskam et al., 2021a; Roskam & Mikolajczak, 2020b). Based on empirical evidence, either the scores for the four first-order factors or the total score for parental burnout can be used both in research and clinical practice. In this section, we comment on the advantages and disadvantages of using either the subscale scores or the total score.

The use of the subscale scores is particularly appropriate when the objective is to study the internal dynamics of the parental burnout syndrome. In research, the PBA subscales make it possible, for example, to study the course of the syndrome in longitudinal studies, the intraindividual variability of symptoms at specific time intervals, and the association between each dimension and antecedents or consequences of parental burnout. The slippery slope of parental burnout can be described in detail in this way (Roskam & Mikolajczak, 2021). Similarly, the specific

association of emotional distancing with parental neglect and violence has been shown using subscale scores (Blanchard et al., 2021; Hansotte et al., 2021). In clinical practice, this is useful for preventing parental burnout. Based on the empirical evidence about the course of parental burnout over time, clinicians need to be able to identify parents who feel exhausted even though they are not yet reporting emotional distancing from their children or a sense of being fed up in their parental role, because it is when such distancing starts to take effect that exhausted parents are more likely to become neglectful of or violent toward their children. Subscale scores can be used to identify parents who are both exhausted and feel emotionally distant from their children.

However, the use of subscale scores is not without limitations. First, we do not have cutoff scores for each dimension. Identifying a parent who is emotionally distant from their children therefore requires a clinical judgment on the part of the professional. The same is true for the prevention of burnout in parents who are exhausted but not (or not yet) emotionally distant from their children or overwhelmed in their parental role. Another limitation is that the four dimensions of parental burnout are highly correlated with each other in all studies that have replicated the model with the four first-order and the second-order dimensions of parental burnout. These results raise the question of the independence of the dimensions and the usefulness of distinguishing between them. In addition, when the reliability indices (Cronbach's alphas) of the subscales have been examined in the validation studies, they have often been found to be lower than those of the total score. This may not only be related to the number of items to which Cronbach's alpha is sensitive, especially for emotional distancing, which contains only three items, but it may also indicate that the validity and the exact meaning of the subscales is questionable in certain populations or cultures. However, the subdimensions are not only useful for factor analyses and reliability indices. Their relevance can also be demonstrated through specific associations between these dimensions and specific correlates. Person-oriented analyses (Hansotte et al., 2021) and network analyses (Blanchard et al., 2021) have already suggested specific links between certain dimensions of parental burnout and the risks of parental neglect and violence, providing further evidence in favor of the usefulness of the subscale scores.

The use of the total score for research is recommended when the objectives are, for example, to test the association between parental burnout and its antecedents (e.g., Mikolajczak et al., 2018b) or consequences (e.g., Mikolajczak et al., 2018a), to estimate the overlap with related constructs such as depression, anxiety, or job burnout (e.g., Mikolajczak et al., 2020), or to evaluate the effectiveness of interventions in randomized controlled studies (e.g., Bayot et al., n.d.; Brianda et al., 2020b). Also, researchers wishing to select parents in burnout need to use the total score, for which we have cutoff scores. In clinical settings, the use of the total score is particularly appropriate when diagnosing a patient or establishing a differential diagnosis with other disorders. The total score also allows the clinician to assess a parent's progress during treatment by examining differences between the burnout score at the beginning of the treatment and after stopping the treatment or in follow-up, for example. However, caution should be exercised regarding the use of the total

score, as parental burnout is not yet an officially recognized disorder. With the literature still burgeoning, the concept of parental burnout is relatively unfamiliar and may be met with skepticism among both researchers and clinicians, and misunderstood by parents.

Limitations

The PBA can be considered a valid instrument for assessing parental burnout. In this chapter, we have shown that although this scale was published as recently as 2018, its psychometric qualities have been replicated in many independent samples of mothers and fathers from a variety of cultures including non-Western ones. Among the many advantages of the PBA are the fact that the scale can be used for free for research and clinical purposes, the availability of translations in many languages, and the validation of clinical cutoffs by a multi-informant, multimethod method. However, despite its strengths, the PBA is not free of limitations (for a review of the strengths and limitations of the PBA, see also Bornstein, 2020).

The first limitation is that the PBA was designed on the basis of testimonies of mothers in burnout. We cannot rule out the hypothesis that other items would have been generated and validated if the scale had been constructed with fathers' testimonies or with testimonies of both mothers and fathers. The psychometric results have demonstrated gender invariance, but comparative analyses have shown that mothers obtain higher burnout scores than fathers (Roskam & Mikolajczak, 2020a). These differences have been interpreted as reflecting the fact that parenting is a gender-oriented social role (Roskam & Mikolajczak, 2020a). As mothers are more involved in parenting than fathers and still perform the majority of the tasks related to childrearing and childcare, it would make sense for them to burn out more frequently than fathers. However, the possibility cannot be excluded that the differences in the mean values between mothers and fathers are the result of a methodological bias. The PBA constructed on the basis of mothers' testimonies may be better at capturing the symptoms of burnout in mothers than in fathers. Qualitative studies with fathers are still needed to understand their experience of parental burnout, and to determine whether an adapted version of the PBA for fathers should be developed. The same reasoning can be applied to cultural specificities. Although the psychometric analyses demonstrate invariance across languages, the PBA items were constructed from the testimonies of French- and English-speaking Western mothers. Other items would likely have been generated from the testimonies of parents from other cultures. Again, qualitative studies would be needed to examine the nature of parental burnout in different cultural contexts. Another limitation concerns the samples on which the validation studies were performed. These were exclusively convenience samples, i.e., samples of parents who were willing and available to answer the questionnaire. These samples cannot be considered representative of the entire population in each country, and the results of validation studies may not be generalizable to populations typically less represented in convenience samples, such as ethnic minorities or parents from very low socioeconomic backgrounds.

Summary: Purpose and Short Description of the Basic Properties

The PBA (PBA, Roskam et al., 2018) is a 23-item self-reported questionnaire designed to assess the symptoms of parental burnout, i.e., exhaustion, emotional distancing, feelings of being fed up, and contrast. This assessment of parental burnout is relevant to mindfulness research that has been successfully applied to parenting but has yet to consider parental burnout as the most severe experience of parenting. Predictive validity has been demonstrated in particular for hair cortisol concentration, suicidal ideations, parental neglect, and parental violence. Validated cutoff scores resulting from a multi-informant and multimethod assessment are available for research and clinical purposes. A brief version of the scale, the BPBs (Aunola et al., 2021), has been developed and validated for use in a preventive approach.

Appendix: The Parental Burnout Assessment (PBA) in Its Current Version

Children are an important source of fulfillment and joy for their parents. At the same time, they may also be a source of exhaustion for some parents. (This is not contradictory: self-fulfillment and exhaustion can coexist, and it is possible to love your children, yet feel exhausted in your role as a parent.) The questionnaire below concerns the feelings of exhaustion that can be experienced as a parent. Choose the answer that best matches what you feel personally. There is no right or wrong answer. If you have never had the feeling, choose "Never." If you have had it, indicate how often this happens by choosing the most applicable option from "A few times a year" to "Every day."

	Never	A few times a year	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I am so tired out by my role as a parent that sleeping does not seem like enough	0	1	2	3	4	5	6
I feel as though I have lost my direction as a dad/mum	0	1	2	3	4	5	6
I feel completely run-down by my role as a parent	0	1	2	3	4	5	6
I have zero energy for looking after my child (ren)	0	1	2	3	4	5	6

(continued)

	Never	A few times a year	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I do not think I am the good father/mother that I used to be to my child (ren)	0	1	2	3	4	5	6
I cannot stand my role as father/mother any more	0	1	2	3	4	5	6
I feel like I cannot take any more as a parent	0	1	2	3	4	5	6
I have the impression that I am looking after my child(ren) on autopilot	0	1	2	3	4	5	6
I have the sense that I am really worn out as a parent	0	1	2	3	4	5	6
When I get up in the morning and have to face another day with my child(ren), I feel exhausted before I have even started	0	1	2	3	4	5	6
I do not enjoy being with my child(ren)	0	1	2	3	4	5	6
I feel like I cannot cope as a parent	0	1	2	3	4	5	6
I tell myself that I am no longer the parent I used to be	0	1	2	3	4	5	6
I do what I am supposed to do for my child(ren), but nothing more	0	1	2	3	4	5	6
My role as a parent uses up all my resources	0	1	2	3	4	5	6
I cannot take being a parent any more	0	1	2	3	4	5	6
I am ashamed of the parent that I have become	0	1	2	3	4	5	6
I am no longer proud of myself as a parent	0	1	2	3	4	5	6
I have the impression that I am not myself any more when I am interacting with my child(ren)	0	1	2	3	4	5	6

(continued)

	Never	A few times a year	Once a month or less	A few times a month	Once a week	A few times a week	Every day
I am no longer able to show my child(ren) how much I love them	0	1	2	3	4	5	6
I find it exhausting just thinking of everything I have to do for my child(ren)	0	1	2	3	4	5	6
Outside the usual routines (lifts in the car, bedtime, and meals), I am no longer able to make an effort for my child(ren)	0	1	2	3	4	5	6
I am in survival mode in my role as a parent	0	1	2	3	4	5	6

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