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Understanding Parental Burnout: Significance and Implications

Isabelle Roskam

*Department of Psychology, UCLouvain, Belgium
isabelle.roskam@uclouvain.be*

Moira Mikolajczak

Department of Psychology, UCLouvain, Belgium

Abstract

Despite the joy and pride it can bring, parenting comes with its share of challenges and negative emotions. It can even sometimes lead to suffering in the parental role. Parental burnout (PB) encompasses a range of negative feelings including exhaustion, emotional distancing, and a loss of pleasure in parental roles. This article explores the complexities of parental burnout, distinguishing it from ordinary parenting stress, and examines its prevalence, antecedents, and consequences. Despite having been recognised since the 1980s, empirical research on PB has surged in the last fifteen years. A validated tool, the Parental Burnout Assessment (PBA), facilitates measurement and understanding of the disorder. It revealed that approximately 5% of parents globally are affected, with significant variations influenced by cultural contexts and individualistic values. Key risk factors include personal traits, parenting practices, and family dynamics, while specific mediators in the relation between culture and parental burnout, such as parental self-discrepancy, affect burnout levels. The article discusses the bidirectional effects of PB on children's behaviour and parental relationships, highlighting increased neglect and aggression. Prevention and treatment are considered essential, emphasising the importance of early identification and compassionate support. Interventions focused on rebalancing parental stressors and resources have shown promising results, reducing symptoms and associated risks of neglect and violence. Ultimately, the article underscores that while parental burnout is a serious concern, it is both a preventable and treatable condition, offering hope for affected families through targeted psychological support.

Keywords: *parental burnout, prevention, treatment, culture*

Introduction

In most cultures around the world, parenting is associated with positive emotions such as joy, pride, and love. The celebrations surrounding births reflect this widely held emotional context. However, being a parent also involves moments of doubt, despair, feelings of failure or helplessness, anger, and fear. These negative emotions are often less emphasised, less recognised, and less audible. Parents struggling with negative emotions in their role often feel disoriented, ashamed, and alone.

A wealth of literature has nevertheless focused on parental stress, considered an integral part of parenting (Deater-Deckard, 2014). Parental stress is a normal response to the challenges of parenting, which typically comes and goes. On the other hand, parental burnout, which emerged in the 1980s, is a more severe and chronic condition (Mikolajczak et al., 2019). It is marked by extreme exhaustion, emotional distancing from one's children, and a loss of satisfaction in the parenting role. The concepts of parental stress and parental burnout are related but distinct concepts with an association of around .50 (Mikolajczak et al., 2023). It is only in the last fifteen years that parental burnout has seen unprecedented growth in empirical research. The term burnout is well known in professional life. It was in the 1960s that the term "burnout" appeared in the professional field with Bradley (1969). Freudenberger (1974) observed that some of the volunteers who worked with him were suddenly exhausted, drained—literally "burnt out"—by contact with patients. He said of these volunteers that they resemble a candle that, after lighting for many hours, has burned out from within and offers only an outdated flame. For this author, burnout was a trouble of the fighter, of the hyper invested. It was Christina Maslach who, in the early 1970s, devoted her scientific work to professional burnout. She observed that some caregivers came to detach themselves from their patients, to consider them as "cases" and not as people. She noticed that these caregivers were exhausted, that they were no longer fulfilled, no longer did they work well, and sometimes even became cynical (Maslach, 1976). For this author, burnout was the trouble of those who take their job of caring and helping others too much to heart.

Maslach proposed a tridimensional conception of job burnout, which was considered as a syndrome resulting from lasting exposure to excessive work stress. People in burnout feel emotionally and physically exhausted by their work, they also tend to depersonalise the beneficiaries of their job (as the nurses who refer to their patients as "the stomach of room 21" rather than as Mrs Johnson, for example). And they feel as they are not as efficient as they used to be. Research has shown that this is not only a perception since burned out employees do make more errors (Garcia et al., 2019).

The parallel between job and parental burnout is particularly interesting because parents can be considered as persons who fight for their children, who are hyper involved in their role as parents. And parenting is a job of caring and helping someone else. The idea of parental burnout originally came from two men, Procaccini and Kieffer (1983), who worked and consulted on job burnout. They did not do any research on parental burnout but wrote a book in which they drew a parallel between job burnout and parental burnout. Their idea was later tested by Pelsma (1989), who found evidence for the first and third dimensions of burnout but not the second. He then gave up the idea. Fortunately, the idea was later taken up by researchers in health psychology who showed that parents of ill or disabled children were more likely to suffer from burnout than control parents. Scientifically, the idea of parental burnout was born. But do parents really need to have an ill or disabled child to be at risk of parental burnout?

The first symptom of parental burnout is physical and emotional exhaustion related to the parental role, leaving the parent with zero energy to care for their children. The second symptom differs somewhat from the depersonalisation observed in job burnout. As Pelsma (1989) discovered, depersonalisation is not characteristic of parental burnout. Instead of perceiving their children as objects, burnt-out parents exhibit emotional distancing from their children. Parents continue to care for their basic needs. They feed them, drive them to school, but do little beyond that. They behave in an autopilot mode with very little emotional involve-

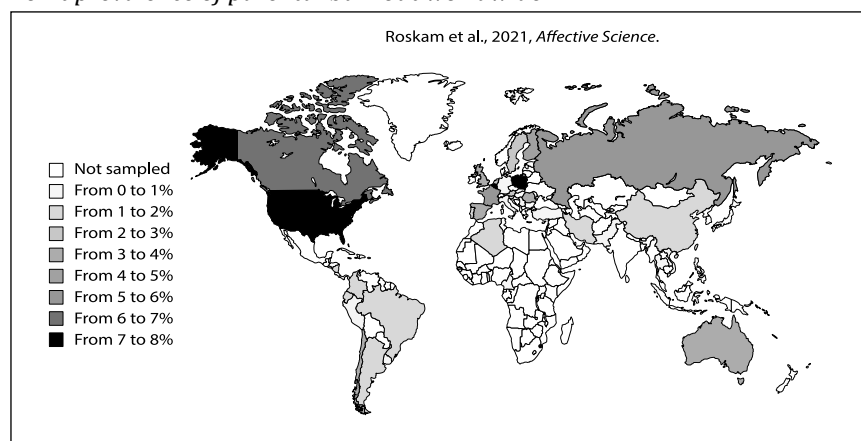
ment in parenting. The third factor is a loss of pleasure and feelings of being fed up with parenting. Parents do not feel happy when they spend time with the child whether during meals, play, or caregiving. The third factor was also somewhat different from the third symptom of job burnout since parents do not lose their sense of efficacy, they still know how to parent and care for their children. But what they lose is the pleasure to parent them. The fourth and last factor refers to the contrast perceived between the current and previous parental self: the parent no longer recognises themselves. They are not the parent they wanted to be, or they were before the episode of burnout. This contrast is often noticed by both the partner and the children who do not recognise their mother or father. Importantly, parents' testimonies showed that burnout was a context-related syndrome. These symptoms are experienced in the parental role. And for burnt-out parents, their job is like a "safe haven" where they feel good. The reverse is true for people experiencing job burnout. For them, the family is the safe heaven and in the family context, they do not feel exhausted, detached, and inefficacious.

Based on these four dimensions, the Parental Burnout Assessment (PBA, Roskam et al., 2018) was developed to evaluate the presence and severity of this disorder. The PBA is currently the gold standard measure of parental burnout. It has been validated in the 15 most widely spoken languages, and externally validated clinical cut-offs are now available to discriminate between parents who are not in burnout, those who are at-risk, and parents who suffer from extreme fatigue (Roskam et al., 2022). Having a validated measurement tool has facilitated the rapid expansion of the research field in many regions around the world. Studies have particularly focused on the prevalence of parental burnout, its specificities regarding close concepts as parental stress, job burnout, depression or parenthood regret, its antecedents, its consequences, and ways to prevent and treat it. Hereafter, we will summarise the main findings in each of these issues.

Prevalence of Parental Burnout: A Global Perspective

What is the prevalence of parental burnout? How common is this phenomenon among parents, and does its prevalence vary across cultural contexts? To address these questions, we conducted a comparative analysis of the point prevalence of parental burnout across 42 countries (Roskam et al., 2021). Point prevalence refers to the proportion of a population experiencing a specific disorder within a defined timeframe. It is typically lower than both 12-month prevalence and lifetime prevalence, which indicates the likelihood of experiencing a burnout episode at some point during one's parenting role. As shown in Figure 1, our findings reveal that the worldwide point prevalence of parental burnout stands at approximately 5%, but that large variations exist across countries.

Figure 1
Point prevalence of parental burnout worldwide



To put this into context, around 200,000 parents in Belgium, 900,000 in France, and over 5 million in the United States are currently experiencing severe symptoms of burnout in their parental roles.

In most of the countries studied, we also observed a gender disparity, with a ratio of two burnt-out mothers for every father. This discrepancy likely arises from the societal perception of mothers as primary caregivers, rendering them more vulnerable to parenting stress than fathers. The prevalence of parental burnout also varies significantly across countries and cultures, with higher rates generally found in Western nations compared to non-Western countries. Culture, as a broad concept encompassing sociodemographic, economic, and sociological factors, plays a crucial role in understanding these differences. To identify which factors account for the variations in parental burnout across countries, we employed a multilevel model, treating parental burnout as the dependent variable. Our analysis indicated that individualistic values accounted for the greatest variance in parental burnout globally. Parents raising their children in cultures characterised by high individualism are at greater risk of experiencing burnout (Roskam et al., 2021).

What factors contribute to the heightened risk of parental burnout in individualistic cultures? In other words, how does raising children in a society shaped by individualistic values affect parental behaviours or attitudes, which in turn increase the risk of burnout in the parenting role? We addressed this question in a recent study (Roskam et al., 2023). The primary mediator identified was parental self-discrepancy. Parents from individualistic societies are more likely to perceive a gap between their socially prescribed parental identity and their actual parenting experience. This perception of inadequacy increases the likelihood of burnout. Western societal standards for parenting may be so demanding that parents feel perpetually insufficient in their roles, which leads to exhaustion and dissatisfaction.

The second significant mediator is parental task-sharing. In individualistic cultures, the heavy responsibilities of parenting are often viewed as the sole burden of the individual parent, resulting in a reluctance to seek help. This self-reliance can hinder the sharing of parenting duties with other caregivers, supporting findings from other fields. Research in areas such as healthcare and corporate settings indicates that individualistic cultural norms, which favour self-sufficiency, are associated with increased burnout and related outcomes (Roskam et al., 2023).

The third mediator is the pursuit of agency and self-directed socialisation goals. Parents in individualistic contexts emphasise values of independence and self-reliance, instilling these ideals in their children from an early age. This focus on autonomy can diminish parental authority, requiring parents to navigate negotiations rather than enforce compliance. Consequently, parenting becomes more demanding and stressful, with no guarantee of a child's obedience (Roskam et al., 2023).

These three mediating mechanisms accounted for 21% of the relationship between country-level individualism and parental burnout. Although this figure is significant, it also suggests that 79% of the impact of individualism on parental burnout is mediated by other factors not addressed in the study (Roskam et al., 2023).

The work on cultural influences on parental burnout is still ongoing. However, we cannot yet dismiss the possibility that some observed differences might arise from methodological artifacts. Specifically, the PBA—the gold standard for measuring parental burnout—was developed by Western researchers based on the experiences of Western parents (Roskam et al., 2018). It remains feasible that the PBA may not adequately capture culturally specific symptoms of burnout, potentially leading to underreported prevalence in non-Western nations. Future research is needed to explore the existence of culturally specific signs of exhaustion, which may contribute to enriching our understanding of universal and culture-specific characteristics of parental burnout.

The Specificity of Parental Burnout

Is parental burnout really distinct from ordinary parenting stress? Is parental burnout merely a manifestation of lazy parenting? To explore whether the stress experienced by parents undergoing burnout is genuinely elevated, we investigated biological indicators, specifically hair cortisol levels, as one of the most reliable markers of chronic stress (Greff et al., 2019). Hair samples allow us to measure cortisol accumulation over varying timeframes: one month (1 cm), two months (2 cm), or three months (3 cm) from a strand collected at the back of the scalp. Beyond that length, the hair becomes too damaged for accurate assessment.

Our study compared hair cortisol levels between parents in burnout and demographically matched control parents—those of similar age, gender, number of children, income, education, and employment status who felt fulfilled in their parenting role. The findings revealed that parents experiencing burnout exhibit significantly increased levels of cortisol, approximately twice those of normal parents. Notably, these levels surpass those found in individuals suffering from chronic pain or victims of domestic violence. This underscores that parental burnout is not merely a psychological construct; it is also an objective reality measurable through biological markers (Brianda, Roskam, & Mikolajczak, 2020).

In distinguishing parental burnout from ordinary stress, we also considered its relationship with similar syndromes, particularly job burnout and depression. As both parental and job burnout are stress-related disorders, questions arise about their correlation. If burnout in one domain inevitably leads to burnout in another, we would expect a high correlation between the two among working parents. However, existing studies indicate a moderate correlation, suggesting that burnout is context-specific: one can experience burnout in one realm without succumbing to it in another. Our meta-analysis of seven studies revealed an average correlation of 0.36 between parental and job burnout. Similarly, the relationship between parental burnout and depression showed a moderate to large correlation, averaging 0.55 (Mikolajczak et al., 2023; Mikolajczak et al., 2020).

To further delineate the conceptual boundaries of parental burnout, we examined its proximity to the concept of parenthood regret (Roskam et al., in revision). While both constructs emerged and received scholarly attention around the same period, they have historically been studied within separate research streams. Parenthood regret is defined as a self-conscious emotion stemming from past decisions—specifically, the decision to have a child—which leads to current dissatisfaction in parental fulfillment. Regret is a universal emotion present from childhood but holds significant weight in the parental context due to its association with the child.

Using Latent Profile Analysis on two independent samples, we identified four distinct profiles: a group of parents with low levels of both parental burnout and parenthood regret; a second group exhibiting high levels of parental burnout but lower levels of regret; a third group with high levels of regret but lower burnout; and a final group with elevated levels of both burnout and regret. Notably, the largest cohort consisted of parents with low levels of both constructs, accounting for approximately 70% (69.1% in Study 1 and 78.9% in Study 2). Conversely, approximately 15% of participants demonstrated high parenthood regret with lower burnout; around 7% displayed high parental burnout with lower regret; and only about 4% exhibited elevated levels of both constructs.

Our analysis suggests that a model in which parental burnout and parenthood regret manifest as separate latent factors fits the data better than a model unifying them under a single construct of parental distress. Consequently, we can conclude that parental burnout and parenthood regret are distinct phenomena: one may experience parental burnout without expressing regret, and vice versa. In some instances, both experiences may coexist (Roskam et al., in revision).

The Antecedents of Parental Burnout

Do certain parent populations face a higher risk of burnout than others? For instance, are parents of young children, adolescents, single parents, or parents of children with special needs at greater risk? Our studies have contested several prevailing myths. We found no increased risk for parents of young children or adolescents, nor for those with gifted children. The risk was slightly elevated for single parents and those in precarious situations, but it was particularly high among parents with children with special needs (Roskam & Mikolajczak, 2023).

If there is no profile of parents at risk of burnout, why do some parents experience burnout while others do not? This question invites an exploration of the aetiology of parental burnout. Much research has been conducted in the organisational sector, where the prevailing model suggests that burnout occurs when individuals face chronic high demands in a context lacking sufficient resources to meet those demands. Does this model hold true within the realm of parenting?

If this hypothesis is correct, we would anticipate that parental burnout arises when the factors contributing to parental stress exceed those that mitigate it. We examined five sets of risk factors. The first set encompasses sociodemographic factors. These include the number and ages of children, family structure (e.g., single-parent, same-sex, or blended families), net household income, and living space size. The second one comprises the situational factors. This category encompasses challenges such as having a child with chronic illnesses, learning difficulties, or special needs. The third one is about personal factors. Traits such as emotional competence, emotion regulation, neuroticism, and parental perfectionism fall under this category. Fourth, we studied the set of parenting factors including poor child-rearing practices, for example. Fifth, we considered a set of family functioning factors. A lack of support from a co-parent and overall family disorganisation are some examples. We finally considered corresponding sets of factors that contribute to parental resources (i.e., factors that alleviate parental stress) to provide a balanced perspective (Mikolajczak, Raes, et al., 2018).

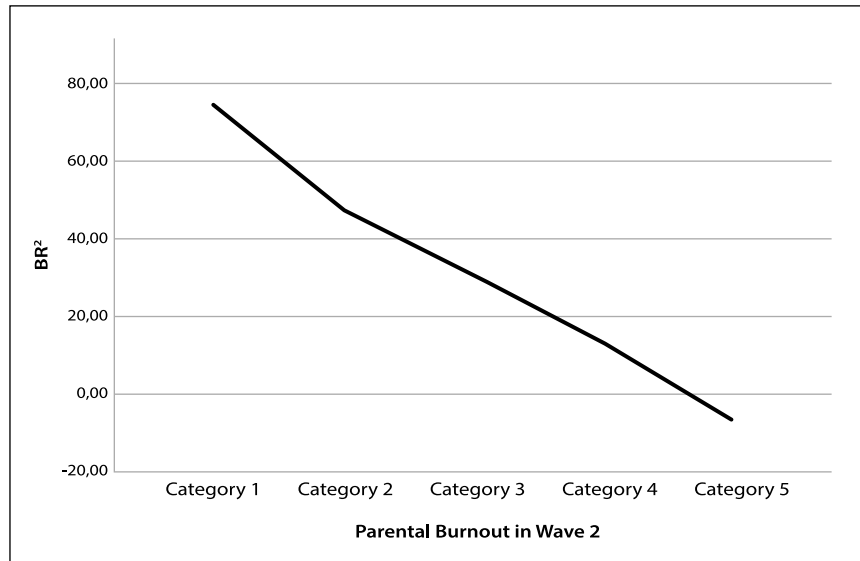
Our findings revealed that sociodemographic and situational factors account for less variance in parental burnout compared to personal factors, parenting practices, and family dynamics. This led us to develop an instrument designed to measure the balance (or imbalance) between significant risks and resources, referred to as the Balance of Risks and Resources (BR²; Mikolajczak & Roskam, 2018).

To validate our model, we conducted a longitudinal study investigating both cross-sectional and prospective relationships between the balance score and instances of parental burnout. As illustrated in Figure 2, parents whose balance leans toward the negative—indicating that the cumulative weight of risk factors surpasses the available resources—are particularly susceptible to burnout. Specifically, when the balance score falls below zero, parents are categorised as experiencing daily symptoms of parental burnout. This correlation was consistently observed in both cross-sectional and prospective analyses. Thus, it can be asserted that parental burnout arises from a chronic imbalance between parenting stressors and available resources. It is important to note, however, that while this common aetiological mechanism exists, each case of parental burnout is unique. The specific stressors and resources involved in shaping the balance vary from parent to parent (Mikolajczak et al., 2023; Roskam & Mikolajczak, 2018).

The BR² model has two important implications. The first is that the factors serving as antecedents of parental burnout have their effects moderated by other factors present in the balance. These moderating factors can either exacerbate the risk of burnout or, conversely, act as a buffer against the antecedent factors. A few studies have been dedicated to examining these interaction effects between stress factors and resources within the balance (e.g., Bayot et al., 2021; Lin et al., 2021; Lin et al., 2022). The second implication is that parental burnout is not a static condition. The number and nature of the factors present in the balance, as well as the imbalance between stress factors and resources, fluctuate over time, leading to changes

Figure 2

The prospective association between the Balance of Risks and Resources (BR2) and levels of parental burnout 6 months later (in Wave 2)



Note. Category 1 = 2/3 of the symptoms never to a few times a year; Category 2 = once a month or less; Category 3 = a few times a month; Category 4 = a few times a week; Category 5 = every day.

in the level of parental burnout at the intrapersonal level. Therefore, parental burnout should be viewed as a dynamic concept rather than a static experience. This has been demonstrated in longitudinal studies (e.g., Piotrowski, 2023; Roskam & Mikolajczak, 2021).

The Consequences of Parental Burnout

What happens when a parent experiences burnout? The consequences of parental burnout are multifaceted, impacting the parent, their children, and their relationship with their spouse.

Research indicates that parents suffering from burnout often experience increased irritability, guilt, and shame, which can lead to feelings of self-hatred. Additionally, they may develop physical symptoms. The connection between physical symptoms and parental burnout is not surprising because elevated cortisol levels in the body are a significant contributor to these outcomes. Chronic stress, as indicated by high cortisol levels, can exacerbate pre-existing health issues. Burnt-out parents sometimes engage in increased alcohol consumption.

Moreover, the overwhelming desire to escape their unbearable parenting situation may manifest as thoughts of self-harm or suicidal ideation (Mikolajczak, Brianda, et al., 2018; Mikolajczak et al., 2019). It is noteworthy that suicidal ideation is considerably more prevalent among parents experiencing burnout than in cases of job burnout or depression. While individuals facing professional burnout may access medical leave or change careers to alleviate stress, parents lack similar avenues for distancing themselves from the source of their stress—their parental responsibilities. Since parenting is a role from which one cannot resign, some parents may develop extreme thoughts, including suicidal ideation.

The effects of parental burnout extend to children as well, leading to increased neglectful and aggressive behaviours. While depression raises the risk of neglect by a factor of six and violence by a factor of seven, parental burnout escalates the risk of neglect by a staggering factor of 13 and the likelihood of violence by a factor of 20 (Mikolajczak et al., 2019).

One poignant testimony comes from Elisabeth, a mother of two, who shared: “I experienced very intense outbursts directed at my daughter. Her screams and cries were unbearable, and I found myself engaging in severe verbal aggression. Although I strived to avoid physical violence, there were moments when I felt an overwhelming desire to harm her. One incident involved putting her down for a nap; when she resisted, I lost control and, at that moment, realised I could jeopardise my children’s safety.” (Hubert & Aujoulat, 2018).

Our recent research also identified a bidirectional effect of parental burnout on children’s behaviour, noting a transactional relationship where difficult behaviours increase parental burnout and vice versa. This cyclical dynamic creates a vicious cycle, exacerbating the challenges faced by both the parent and child (Woine et al., under review; Woine et al., 2024).

Lastly, parental burnout adversely affects romantic relationships, leading to increased distance and conflict between partners (Mikolajczak, Brianda, et al., 2018). Elisabeth further recounted her experiences, stating, “I felt exasperated by my children constantly demanding my attention. When my husband arrived home, I would often explode with frustration, venting my feelings towards him rather than addressing my children. Unfortunately, this resulted in verbal insults and created a toxic atmosphere.”

Prevention and Treatment of Parental Burnout

Addressing parental burnout is crucial, given both the disorder’s prevalence and its serious consequences. Prevention is the first line of defence against parental burnout. Our research indicates that the symptoms of burnout do not manifest simultaneously; rather, they appear in a specific sequence (Roskam & Mikolajczak, 2021). The initial signs typically involve exhaustion, followed by emotional distancing and a loss of pleasure in parenting. Importantly, neglectful and aggressive behaviours towards children emerge when parents begin to emotionally detach (Hansotte et al., 2021). This detachment often results in diminished empathy, further exacerbating the cycle of disconnection.

Currently, many parents seek help only after reaching a severe level of burnout, which complicates prevention efforts. There is a societal stigma associated with acknowledging feelings of exhaustion or dissatisfaction in parenting. Being associated with positive emotions such as joy and pride, it is difficult for parents to admit when they feel overwhelmed in their role as mother or father. If we could enhance early identification and support for parents in the initial stages of exhaustion, we could mitigate the risks associated with burnout, including suicidal ideation, child neglect, and behavioural issues in children. This requires breaking the taboo surrounding parental burnout, and conferences like this one play a vital role in changing the conversation.

Both prevention and treatment of parental burnout require a compassionate approach. Burnt-out parents need a safe space where their feelings can be acknowledged without judgment. Admitting distress in parenting—feeling overwhelmed or losing enjoyment in time spent with children—can evoke shame and guilt. Thus, it is essential to approach these negative emotions with utmost respect and understanding.

Once parents feel heard, we can address the roots of parental burnout. Our aetiological model serves as a framework through which we can effectively reduce burnout symptoms (Mikolajczak & Roskam, 2018). Longitudinal research indicates that parental burnout does not resolve spontaneously; therefore, we cannot rely on time alone for recovery. However, results from our randomised controlled trials demonstrated that targeted psychological interventions can significantly help parents by “rebalancing” their stressors and resources (Bayot et al., revised; Brianda, Roskam, Gross, et al., 2020).

The intervention begins with identifying the specific stressors and resources unique to each parent’s situation. The nature, quantity, and impact of these factors vary among individuals. The goal of the

treatment is twofold: to reduce the number and weight of accumulated stressors—such as high parental standards—and to enhance the resources available to cope with current challenges.

Our findings revealed that an 8-week group intervention is effective in facilitating this rebalancing process. Participants reported an average symptom reduction of 37%, sustained even three months post-treatment. Additionally, there was a 30% decrease in instances of child neglect among parents who underwent the intervention, illustrating the direct link between parental burnout and neglectful behaviour (Brianda, Roskam, Gross, et al., 2020).

Furthermore, the intervention significantly decreased parental violence against children. Reductions in burnout symptoms corresponded with lower incidences of violence, reinforcing the notion that these behaviours stem directly from parental burnout.

Notably, we also observed a 52% decrease in hair cortisol levels among parents, suggesting a physiological recovery as their stress levels normalised to those of control parents. This objective measure corroborates the subjective improvements reported by both parents and therapists, highlighting that treatment yields tangible results.

Conclusion

In conclusion, while parental burnout is a severe and prevalent disorder with concerning consequences for families, it is also a condition that can be effectively treated. With appropriate support, parents can recover, experience a reduction in symptoms, and see a corresponding decline in physiological stress. Importantly, the risk of child misbehaviour, neglect, and abuse can be significantly diminished with effective intervention.

References

- Bayot, M., Brianda, M. E., Van Der Straten Waillet, N., Mikolajczak, M., Shankland, R., & Roskam, I. (revised). Mindfulness and compassion-based approach to parental burnout: A randomized controlled trial with validated group treatment. *Journal of Child and Family Studies*.
- Bayot, M., Roskam, I., Gallée, L., & Mikolajczak, M. (2021). When Emotional Intelligence Backfires. *Journal of Individual Differences, 42*(1), 1-8. <https://doi.org/10.1027/1614-0001/a000324>
- Bradley, H. B. (1969). Community-based treatment for young adult offenders. *Crime & Delinquency, 15*(3), 359-370.
- Brianda, M. E., Roskam, I., Gross, J. J., Franssen, A., Kapala, F., Gérard, F., & Mikolajczak, M. (2020). Treating Parental Burnout: Impact of Two Treatment Modalities on Burnout Symptoms, Emotions, Hair Cortisol, and Parental Neglect and Violence. *Psychotherapy and Psychosomatics, 89*(5), 330-332. <https://doi.org/10.1159/000506354>
- Brianda, M. E., Roskam, I., & Mikolajczak, M. (2020). Hair cortisol concentration as a biomarker of parental burnout. *Psychoneuroendocrinology, 117*, 104681. <https://doi.org/https://doi.org/10.1016/j.psypneuen.2020.104681>
- Deater-Deckard, K. (2014). *Parenting Stress*. University Press. <https://books.google.be/books?id=GWfdngEACAAJ>
- Freudenberger, H. J. (1974). Staff Burn-Out. *Journal of Social Issues, 30*(1), 159-165. <https://doi.org/10.1111/j.1540-4560.1974.tb00706.x>
- Garcia, C. L., Abreu, L. C., Ramos, J. L. S., Castro, C. F. D., Smiderle, F. R. N., Santos, J. A. D., & Bezerra, I. M. P. (2019). Influence of Burnout on Patient Safety: Systematic Review and Meta-Analysis. *Medicina (Kaunas, Lithuania), 55*(9). <https://doi.org/10.3390/medicina55090553>
- Greff, M. J. E., Levine, J. M., Abuzgaia, A. M., Elzagallaai, A. A., Rieder, M. J., & van Uum, S. H. M. (2019). Hair cortisol analysis: An update on methodological considerations and clinical applications. *Clinical Biochemistry, 63*, 1-9. <https://doi.org/10.1016/j.clinbiochem.2018.09.010>
- Hansotte, L., Nguyen, N., Roskam, I., Stinglhamber, F., & Mikolajczak, M. (2021). Are all Burned Out Parents Neglectful and Violent? A Latent Profile Analysis. *Journal of Child and Family Studies, 30*(1), 158-168. <https://doi.org/10.1007/s10826-020-01850-x>
- Hubert, S., & Aujoulat, I. (2018). Parental Burnout: When Exhausted Mothers Open Up. *Frontiers in Psychology, 9*, 1021. <https://doi.org/https://doi.org/10.3389/fpsyg.2018.01021>
- Lin, G.-X., Szczygieł, D., Hansotte, L., Roskam, I., & Mikolajczak, M. (2021). Aiming to be perfect parents increases the risk of parental burnout, but emotional competence mitigates it. *Current Psychology, 1-9*.
- Lin, G.-X., Szczygieł, D., & Piotrowski, K. (2022). Child-oriented perfectionism and parental burnout: The moderating role of parents' emotional intelligence. *Personality and Individual Differences, 198*, 1-6. <https://doi.org/10.1016/j.paid.2022.111805>
- Maslach, C. (1976). Burnout. *Human Behavior, 5*(9), 16-22.
- Mikolajczak, M., Aunola, K., Sorkkila, M., & Roskam, I. (2023). 15 Years of Parental Burnout Research: Systematic Review and Agenda. *Current Directions in Psychological Science, 32*(4), 09637214221142777. <https://doi.org/10.1177/09637214221142777>
- Mikolajczak, M., Brianda, M. E., Avalosse, H., & Roskam, I. (2018). Consequences of parental burnout: Its specific effect on child neglect and violence. *Child Abuse and Neglect, 80*, 134-145. <https://doi.org/10.1016/j.chiabu.2018.03.025>
- Mikolajczak, M., Gross, J. J., & Roskam, I. (2019). Parental Burnout: What Is It, and Why Does It Matter? *Clinical Psychological Science, 7*(6), 1319-1329. <https://doi.org/10.1177/2167702619858430>

- Mikolajczak, M., Gross, J. J., Stinghlamber, F., Lindahl Norberg, A., & Roskam, I. (2020). Is parental burnout distinct from job burnout and depressive symptomatology? . *Clinical Psychological Science*, 8(4), 673-689. <https://doi.org/10.1177/2167702620917447>
- Mikolajczak, M., Raes, M.-E., Avalosse, H., & Roskam, I. (2018). Exhausted parents: Sociodemographic, child-related, parent-related, parenting and family-functioning correlates of parental burnout. *Journal of Child and Family Studies*, 27(2), 602-614. <https://doi.org/https://doi.org/10.1007/s10826-017-0892-4>
- Mikolajczak, M., & Roskam, I. (2018). A Theoretical and Clinical Framework for Parental Burnout: The Balance Between Risks and Resources (BR²). *Frontiers in Psychology*, 9(886). <https://doi.org/10.3389/fpsyg.2018.00886>
- Pelsma, D. M. (1989). Parent Burnout: Validation of the Maslach Burnout Inventory with a Sample of Mothers. *Measurement and Evaluation in Counseling and Development*, 22(2), 81-87.
- Piotrowski, K. (2023). Trajectories of parental burnout in the first year of the COVID-19 pandemic. *Family Relations*, 72(3), 680-696. <https://doi.org/https://doi.org/10.1111/fare.12819>
- Procaccini, J., & Kieffer, M. W. (1983). *Parent burnout*. Double day.
- Roskam, I., Aguiar, J., Akgun, E., Arena, A. F., Arikan, G., Aunola, K., Besson, E., Beyers, W., Boujut, E., Brianda, M. E., Brytek-Matera, A., Budak, A. M., Carbonneau, N., César, F., Chen, B. B., Dorard, G., Dos Santos Elias, L. C., Dunsmuir, S., Egorova, N.,...Mikolajczak, M. (2023). Three reasons why parental burnout is more prevalent in individualistic countries: a mediation study in 36 countries. *Social Psychiatry and Psychiatric Epidemiology*. <https://doi.org/10.1007/s00127-023-02487-z>
- Roskam, I., Aguiar, J., Akgun, E., Arikan, G., Artavia, M., Avalosse, H., Aunola, K., Bader, M., Bahati, C., Barham, E. J., Besson, E., Beyers, W., Boujut, E., Brianda, M. E., Brytek-Matera, A., Carbonneau, N., César, F., Chen, B.-B., Dorard, G.,...Mikolajczak, M. (2021). Parental Burnout Around the Globe: a 42-Country Study. *Affective Science*, 2(1), 58-79. <https://doi.org/10.1007/s42761-020-00028-4>
- Roskam, I., Bayot, M., & Mikolajczak, M. (2022). Parental Burnout Assessment (PBA). In O. N. Medvedev, C. U. Krägeloh, R. J. Siegert, & N. N. Singh (Eds.), *Handbook of Assessment in Mindfulness Research* (pp. 1-22). Springer International Publishing. https://doi.org/10.1007/978-3-030-77644-2_81-1
- Roskam, I., Brianda, M.-E., & Mikolajczak, M. (2018). A Step Forward in the Conceptualization and Measurement of Parental Burnout: The Parental Burnout Assessment (PBA) [Original Research]. *Frontiers in Psychology*, 9(758). <https://doi.org/10.3389/fpsyg.2018.00758>
- Roskam, I., & Mikolajczak, M. (2018). La Balance des Risques et des Ressources (BR²): un modèle explicatif et clinique du burn-out parental. In *Le burn-out parental: comprendre, diagnostiquer et prendre en charge*. de Boeck.
- Roskam, I., & Mikolajczak, M. (2021). The slippery slope of parental exhaustion: A process model of parental burnout. *Journal of Applied Developmental Psychology*, 77, 101354. <https://doi.org/https://doi.org/10.1016/j.appdev.2021.101354>
- Roskam, I., & Mikolajczak, M. (2023). Parental Burnout in the Context of Special Needs, Adoption, and Single Parenthood. *Children (Basel)*, 10(7). <https://doi.org/10.3390/children10071131>
- Roskam, I., Mikolajczak, M., & Piotrowski, K. (in revision). Unveiling the Uniqueness of Parental Burnout and Parenthood Regret: Impact on Parents and Children. *Clinical Psychological Science*.
- Woine, A., Dardier, V., Mikolajczak, M., & Roskam I. (under review). Bidirectional and transactional effects between parental burnout and child internalizing and externalizing behaviors.
- Woine, A., Escobar, M. J., Panesso, C., Szczygiel, D., Mikolajczak, M., & Roskam, I. (2024). Parental burnout and child behavior: A preliminary analysis of mediating and moderating effects of positive parenting. *Children*, 11(3). <https://doi.org/10.3390/children11030353>