



Contents lists available at ScienceDirect

Child Abuse & Neglect

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

Consequences of parental burnout: Its specific effect on child neglect and violence

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ARTICLE INFO

Keywords:

Parent
Burn-out
Exhaustion
Suicide
Abuse
Maltreatment

ABSTRACT

Parental burnout is a specific syndrome resulting from enduring exposure to chronic parenting stress. It encompasses three dimensions: an overwhelming exhaustion related to one's parental role, an emotional distancing from one's children and a sense of ineffectiveness in one's parental role. This study aims to facilitate further identification of the consequences of parental burnout for the parents themselves, their spouses and their child(ren). In a sample of 1551 parents, we examined the relationship between parental burnout and seven possible consequences: escapism and suicidal thoughts, addictions, sleep disorders, marital conflicts, a partner estrangement mindset, and neglect and violence towards one's child(ren). We examined (1) to what extent parental and job burnout related to each of these possible consequences and (2) whether parental burnout is specifically related to neglectful and violent behaviour towards one's child(ren). The results suggest that parental burnout has a statistically similar effect to job burnout on addictions and sleep problems, a stronger effect on couples' conflicts and partner estrangement mindset and a specific effect on child-related outcomes (neglect and violence) and escape and suicidal ideation. These results emphasize the importance of accurately diagnosing this syndrome.

1. Introduction

Parenting has been shown to be a both complex and stressful job (for reviews, see Abidin & Abidin, 1990; Crnic & Low, 2002; Deater-Deckard, 2008), to the point that parents sometimes feel that they lack energy for parenting (Janisse, Barnett, & Nies, 2009). As a matter of fact, it has recently been shown that, just as enduring exposure to excessive job stress can lead to *job* burnout, enduring exposure to overwhelming parenting stress can lead to *parental* burnout (Lindström, Aman, & Norberg, 2011; Norberg, 2007; Norberg, 2010; Norberg, Mellgren, Winiarski, & Forinder, 2014). Like job burnout, parental burnout encompasses three dimensions. The first is overwhelming exhaustion related to one's parental role: parents feel that being a parent requires too much involvement; they feel tired when getting up in the morning and having to face another day with their children; they feel emotionally drained by the parental role to the extent that thinking about their role as parents makes them feel they have reached the end of their tether. The second dimension is an emotional distancing from their children: exhausted parents become less and less involved in parenting and in the relationship with their children; they do the bare minimum for the children but no more; interactions are limited to functional/instrumental aspects at the expense of emotional aspects. The third dimension is a sense of ineffectiveness in the parental role: parents feel that they cannot handle problems calmly and/or effectively.

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<https://doi.org/10.1016/j.chiabu.2018.03.025>

Received 22 October 2017; Received in revised form 9 February 2018; Accepted 14 March 2018

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Parental burnout is a unique and context-specific syndrome, related to yet empirically distinct from depression, job burnout, and parental stress (Roskam, Raes, & Mikolajczak, 2017). Just as job stress does not always lead to job burnout, parental stress does not always lead to parental burnout. Both employees and parents can bear a lot of stress if they have enough resources to compensate for the effect of stress. As has been shown in the organizational domain, job burnout develops when demands are high and resources are limited (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). We have recently shown that the same applies in the parenting domain: parental burnout occurs when risks (demands) are not compensated by enough resources (Mikolajczak & Roskam, *in press*). The conceptual difference between parental stress and parental burnout is also evident in the instruments used to measure both concepts: none of the instruments used to measure parental stress include the core dimensions of parental burnout, namely exhaustion and emotional distancing from the children. Note that the difference between stress and burnout is not only conceptual: research in the organizational domain has shown that they translate into different physiological correlates (e.g., Pruessner, Hellhammer, & Kirschbaum, 1999) and that job burnout has more damaging consequences on the individual and the organization than job stress (e.g., Pines & Keinan, 2005).

The consequences of parental burnout have not been investigated so far and the specificity of its consequences relative to job burnout is unknown. The aim of this paper is to explore these questions. The variables envisaged in this study as possible consequences of parental burnout were chosen if they met one of the following three criteria: (1) they are documented consequences of parenting stress; (2) they are documented consequences of job burnout and the reasons why they are related to job burnout could apply to parental burnout (e.g., job burnout has been shown to increase alcohol use as a means of diffusing the tension accumulated during the day; this reasoning could apply to parental burnout too); (3) they are frequently reported in burnt-out parents' testimonies. Based on the criteria reported above, we hypothesized that parental burnout would have the following detrimental consequences on the parent, the couple and the children.

1.1. Consequences on the parent

The vast majority of burnt-out parents that we have met in the framework of our qualitative studies or consultations have reported escape ideation taking the form of either suicidal thoughts or the desire to leave without leaving any address. This is not so surprising, as the literature on job burnout also shows a moderate relationship between burnout and suicidal thoughts (e.g., Olkinuora et al., 1990; van der Heijden, Dillingh, Bakker, & Prins, 2008). However, we expected to find an even stronger link with parental burnout because there is a crucial difference between professional and parenting roles: the employee who is in burnout or about to burn out can resign and, in fact, many burnout workers think of leaving their company (e.g., Schaufeli & Bakker, 2004; see Alarcon, 2011 for a meta-analysis) or even their profession (Jourdain & Chênevert, 2010). If leaving is not an option and if work becomes a source of exhaustion to the point of damaging the body, the employee may be placed on sick leave. None of this is possible for parents: one cannot resign from one's parenting role and one cannot be put on sick leave from one's children. This may be what leads parents in parental burnout to consider extreme solutions to run away from their parenthood, such as suicide or flight.

Suicide and flight are both forms of physical escape. But there are also psychological ways to escape from a situation perceived as unbearable. In a community study, Deleuze et al. (2015) showed that smoking, drinking alcohol, shopping, exercising, binge eating, telephoning, working, spending time on social networks and the Internet are all frequent means used by ordinary people in order to distract themselves from and regulate unpleasant moods. About a third of their sample tended to regulate their mood through excessive involvement in one or more of these behaviors. Although these subjects were not characterized by an addictive behavior pattern per se, the authors point out that people who consume these substances or engage in these distractive behaviors in order to escape from uncomfortable feelings or experiences are vulnerable to developing addictions to these substances/behaviors if stress/negative emotions intensify or persist. Because burnout is the result of enduring and excessive stress, we hypothesized that both job and parental burnout would be related to greater risk of addiction to the above-mentioned behaviors. Research conducted on job burnout has already shown that it has dramatic effects on alcohol use, increasing the risk of alcohol dependence by up to 80% (Ahola et al., 2006).

A last consequence for parents investigated here concerns sleep. Almost all of the burnt-out parents we have met and interviewed reported sleep disorders. This is not surprising: multiple studies have demonstrated a two-way, circular link between stress spectrum disorders (including burnout) and sleep: on the one hand, lack of sleep reduces the resources needed to manage stress (see Palmer & Alfano, 2017 for review), and on the other hand, stress decreases the amount and quality of sleep (Åkerstedt, 2006). The testimonies of parents in burnout on their poor quality of sleep are perfectly congruent with the studies carried out in the field of job burnout. These studies show that people in burnout have significant disturbances in the quality and nature of sleep: they take longer to fall asleep, spend more time in the stages of light sleep, and less time in slow-wave and REM sleep; they also have more fragmented sleep with more micro-arousals and nocturnal awakenings (Ekstedt, Söderström, & Åkerstedt, 2009). These objective disturbances probably explain why people in burnout report feeling as tired on waking as control people do before going to bed (Ekstedt et al., 2009). Prospective studies support the idea of a vicious circle: sleep deprivation is a risk factor for burnout (Söderström, Jeding, Ekstedt, Perski, & Åkerstedt, 2012) and burnout is a risk factor for sleep disorders (Armon, Shirom, Shapira, & Melamed, 2008). The perturbations mentioned above normalize with the recovery of burnout (Ekstedt et al., 2009). Because of the importance people attach to their parental role, we expected that the association between parental burnout and sleep would be on average of the same magnitude as that between job burnout and sleep.

1.2. Consequences for the partner/spouse

We hypothesized that parental burnout would not only affect parents themselves but also those close to them. The parent's partner may be particularly affected if the parent perceives him/her as responsible for his/her situation (due to not offering enough support, for example). In any case, the spouse rarely appears to be spared. Some of the parents we have met confessed off-loading onto their spouse a part of the irritability they felt towards their children. Others said that burnout depleted their resources to the point that the slightest little thing made them angry. These testimonies accord well with research into job burnout, which shows that it increases irritability and anger-related emotions (e.g., [Ersoy-Kart, 2009](#)). For these reasons, we expected to find an association between parental burnout and conflicts with the co-parent. If present, these conflicts, combined with the desire to escape the family situation as a whole, could prompt a partner estrangement mindset (ideations or acting out).

1.3. Consequences for the child(ren)

The published testimonies of burnt-out parents (e.g., [Allenou, 2011](#)) as well those collected within the framework of our qualitative research suggest that parental burnout increases the risk of neglectful and violent behavior towards one's child(ren). The vast majority of severely burnt-out mothers that we interviewed reported either neglectful behavior (e.g., sleeping on the couch while leaving a three-year-old child unsupervised) or acts of verbal violence (insults, hysterical yelling) and sometimes even physical violence (blows, slaps) which make them fear for the safety of their children when they are alone with them. Interestingly, none of these mothers endorsed lax parenting or harsh punishment values and all of them reported feeling extremely guilty after these episodes. The hypothesis that parental burnout would increase neglectful and abusive behavior would accord with the literature on parenting stress, job burnout and informal caregivers. There is evidence that maltreating parents report higher parenting stress than non-maltreating parents ([Holden & Banez, 1996](#)) and that parenting stress increases child abuse potential ([Crouch & Behl, 2001](#); [Rodriguez & Green, 1997](#)). Studies of informal caregivers suggest that stress does more than just increase abuse *potential*: there is a significant correlation between the caregiver's burnout score and the frequency of acts of physical or verbal violence towards their sick relative ([Yan, 2014](#)). Two studies of nurses working in nursing homes also show strong correlations between job burnout and the frequency of neglect and abuse of the elderly ([Borteyrou & Paillard, 2014](#); [Truchot, Borteyrou, Andela, & Huguenotte, 2013](#)). We therefore hypothesized that parental burnout would increase acts of neglect and acts of verbal or physical violence towards child(ren). We further hypothesized that it would do so more than job burnout.

2. Aim of the current research

The consequences of parental burnout have never been empirically examined so far. The main goal of this research is to explore the association between parental burnout and seven theoretically relevant consequences in a general, non-specific sample of parents. All hypotheses were anchored in field observations, interviews and clinical practice. However, because field and clinical observations can sometimes be misleading, large empirical sample studies such as these are needed before definite conclusions can be drawn. A secondary goal is to examine the specificity of these associations in comparison with job burnout, investigating particularly the incremental effect of parental burnout on child-related outcomes.

Note that whereas we did have hypotheses regarding the associations of parental burnout with the various consequences examined here, we did not have differential hypotheses regarding parental burnout sub-dimensions. The results will be nevertheless presented both for the global score and the sub-dimensions.

3. Method

3.1. Participants

Data were collected from a sample of 2126 French-speaking parents who had at least one child living at home. In order to answer the research question of the current study (i.e., measuring and comparing the consequences of parental burnout on the parent, on the children and on the couple), we kept only the 1551 participants who answered all questionnaires. Because they could not answer questions about the couple, single parents were excluded (if they had been included, effect sizes of parental burnout on the parent, on the children and on the couple could not really be compared because the samples used to derive these effect sizes would have been different). Analyses regarding this specific subsample ($N = 575$) are presented in Supplemental Material. Of the 1551 participants who completed all measures, 1175 were women (75.8%) and 376 were men (24.2%). The women's ages ranged from 23 to 63 years (mean age = 38.23; $SD = 7.28$), and the men's ranged from 27 to 66 years (mean age = 42.61; $SD = 8.47$). The majority of the sample came from Belgium (95.1%), a minority from other French-speaking European countries (4.3%) and the remaining 0.6% from non-European French-speaking countries. 61.4% of participants were married, while 38.6% were legally cohabiting. Overall, the participants had from 1 to 7 children, aged from 0 to 35 years (mean age = 8.49; $SD = 6.70$). Among the participants, 18.4% were educated to secondary level, 38% had a first degree from university or college, 32.6% a master's degree and 11.0% had a Ph.D. or MBA degree. Income was distributed as follows: 10.6% had a net monthly household income lower than €2500, 47.2% between €2500 and €4000, 29.7% between €4000 and €5500, and 12.5% higher than €5500.

3.2. Procedure

The current study received the approval of the Institutional Review Board. Participants were informed about the survey through social networks, websites, schools, pediatricians or word of mouth. In order to avoid (self-)selection bias, participants were not informed that the study was about parental burnout. The study was presented as a study about “Parental well-being and exhaustion”. Parents were eligible to participate only if they had (at least) one child still living at home. Participants were invited to complete the survey after giving informed consent. The informed consent they signed allowed participants to withdraw at any stage without having to justify their withdrawal. They were also assured that data would remain anonymous. Participants who completed the questionnaire had the opportunity to enter a lottery with a chance of winning €300, a stay for two persons in a hotel, or amusement park or wellness center tickets. Participants who wished to participate in the lottery had to provide their email address, but this was disconnected from their questionnaire. The questionnaire was completed online with the forced choice option, ensuring a dataset with no missing data.

3.3. Measures

3.3.1. Parental burnout

Parental burnout was assessed with the Parental Burnout Inventory (PBI¹) (Roskam et al., 2017), a 22-item self-report questionnaire consisting of three subscales: Emotional Exhaustion (8 items) (e.g. *I feel emotionally drained by my parental role*), Emotional Distancing (8 items) (e.g. *I sometimes feel as though I am taking care of my children on autopilot; I can no longer show my children how much I love them*), and Loss of Parental Accomplishment and Efficacy (6 items) (e.g. *I accomplish many worthwhile things as a parent*). PBI items were rated on the same 7-point Likert scale as in the original MBI: never (0), a few times a year or less (1), once a month or less (2), a few times a month (3), once a week (4), a few times a week (5), every day (6). A global score was obtained by summing the appropriate item scores, with higher scores indicating greater burnout; the items of the personal accomplishment factor were therefore reverse-scored. The PBI shows good psychometric properties (Roskam et al., 2017). Cronbach's alphas in the current sample were 0.93 for the global score, 0.94 for Emotional Exhaustion, 0.88 for Emotional Distancing and 0.86 for Loss of Parental Accomplishment and Efficacy.

3.3.2. Job burnout

Job burnout was assessed with the Maslach Burnout Inventory-General Survey (MBI-GS; Schaufeli, Leiter, Maslach, & Jackson, 1996). The MBI is a widely used 16-item questionnaire encompassing three factors: emotional exhaustion (5 items), cynicism (5 items) and professional efficacy (6 items). Items are in the form of “*I feel emotionally drained from my work*”. The instruction is as follows: “Please read each statement carefully and decide if you ever feel this way about your job”. Likert-type scales are in the form of “How often?”, with a 7-point scale of frequency, i.e. never (0), a few times a year or less (1), once a month or less (2), a few times a month (3), once a week (4), a few times a week (5), every day (6). The global score is computed after reversing the items of the professional efficacy factor, so that higher scores indicate greater burnout. The Cronbach alpha found in the current sample was 0.82.

3.3.3. Socio-demographic factors

Participants were asked about their age, gender, country, number of children, gender and age of each child, marital status, type of family (single parent, living with the children's father/mother, blended family), level of education, net household income and work regimen.

3.3.4. Consequences for the parent

3.3.4.1. Escape and suicidal ideations. Escape and suicidal ideations were assessed with a questionnaire created for the purpose of this study based on the testimonies of burnt-out parents. The questionnaire comprises seven items (*I want to change my life, to experience something different from being a parent; I have thoughts about leaving my family; I threaten my family with leaving; I sometimes want to leave everything and start a new life; Sometimes I want to leave everything and leave without leaving any address; I have suicidal thoughts; I think that my family would be happier if I were to leave or disappear*) rated on a 7-point Likert scale (never, less than once a month, about once a month, two or three times a month, once a week, several times a week, every day). The internal consistency of the scale (Cronbach's alpha) was 0.86.

3.3.4.2. Addictions. Addictions were measured with the “Comprehensive Inventory of Substance and Behavioral Addictions” (CISBA; Deleuze et al., 2015), a questionnaire designed to screen for a wide range of potentially addictive behaviors (relating to alcohol, tobacco, cannabis, other drugs, gambling, shopping, exercising, working, eating, Internet, mobile phone; plus one item named “others” that allow respondents to report any other potentially addictive behavior). Each behavior is screened sequentially. If the respondent is not concerned by a given behavior (e.g., the person does not smoke), further questions are automatically skipped. If the respondent is concerned, two questions are asked. The first question concerns the frequency with which the respondent engages in

¹ As Items 1–8 and 17–22 were adapted from the Maslach Burnout Inventory (MBI), the copyright holder of the MBI holds the rights for these items: Copyright © 1981 Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com. Altered with permission of the publisher.

each behavior (five-point Likert scale: 1 = “never,” 2 = “less than once per month,” 3 = “a few times per month,” 4 = “a few times per week,” and 5 = “every day or almost every day”). Common activities that almost everyone is involved in, such as shopping, exercising, working, eating, and using a mobile phone, were screened for their corresponding *excessive* manifestation (compulsive shopping; binge eating; intensive exercise, work, or use of the mobile phone). For these behaviors specifically, the respondents were asked to take into consideration only the excessive episodes to avoid the measurement of regular, non-excessive, everyday behaviors. For example, excessive shopping was assessed with the following item: “During the last three months, how often did you do excessive shopping (e.g., unnecessary purchases, significant expenses)?”, and excessive working was assessed with the following item: “During the last three months, how often did you work in an excessive way and beyond your obligations (e.g., overtime, during the weekend, at home at night)?”. Some behaviors (i.e., drug consumption, gambling and Internet use) were followed by an additional list of subtypes: cocaine, amphetamines, solvents, sedatives, hallucinogens, and opiates (for drugs); lotteries, online poker and casino, poker and cards, casino games, slot machines, scratch cards, and bets (for gambling activities); multiplayer games, other games, social networking, chatting, online pornography, and searching or downloading (for online activities). For these multifaceted activities, participants could also indicate a subtype that was not proposed. The frequency score results from a sum of all addiction frequencies. While the first question concerned the frequency, the second question concerned the presence of dysfunctional consequences: “During the last three months, did your xxx (behavior: e.g., alcohol consumption) bring about negative consequences in your everyday life (e.g., reproaches or quarrels with the family and/or friends, judicial problems, health problems, negative impact on work life)?” on a four-point Likert scale (totally agree, tend to agree, tend to disagree, totally disagree). The negative consequences score results from a sum of all dysfunctional consequences.

3.3.4.3. Sleep. Sleep was evaluated by a short questionnaire assessing sleep onset latency (*During the last month, how many minutes on average did it take you to fall asleep at night?*), frequency of sleep difficulties (sleep onset latency > 30 min; nocturnal awakenings > 20 min; waking > 20 min before alarm; nightmares) on a four-point scale (never; less than once a week; once or twice a week; three times a week or more), and subjective sleep quality during the last month on a four-point scale (very good; good; poor, very poor). A score for sleep problems was obtained by computing a factorial score encompassing these six elements. The internal consistency of the scale (Cronbach’s alpha) was 0.71. To complement this score, the average sleep efficiency was also investigated (= number of hours spent sleeping/number of hours spent in bed).

3.3.5. Consequences for the partner/spouse

3.3.5.1. Conflicts. Conflicts were assessed via two items: “How often do you quarrel with your partner?” and “How often do you quarrel with your partner in front of your child(ren)?” rated on a 7-point Likert scale: never, less than once a month, about once a month, two or three times a month; once a week; several times a week; every day. The internal consistency (Cronbach’s alpha) was 0.85.

3.3.5.2. Partner estrangement. Partner estrangement was assessed via five items (“I sometimes fantasize about someone other than my partner”, “I am sometimes unfaithful to my partner”, “We have separate rooms or I go to sleep elsewhere”, “I sometimes think of leaving my partner” and “I threaten my partner with leaving”) rated on an 8-point Likert scale: never, less than once a month, about once a month, two or three times a month, once a week, several times a week, every day, several times a day. The internal consistency (Cronbach’s alpha) was 0.73.

3.3.6. Consequences for the child

3.3.6.1. Neglectful and violent behavior towards one’s child(ren). Neglectful and violent behavior towards one’s child(ren) were assessed with 17 and 15 items respectively selected from four existing questionnaires: the Dating Violence Questionnaire (DVQ; Douglas & Straus, 2006), the Harsh Parenting and Ignoring scales of the Evaluation of Parental Educational Practices (EPEP; Meunier & Roskam, 2007), the Parent-Child Conflict Tactics Scale (CTSPC; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) and the Child Abuse Potential Inventory (CAPI; Milner, 1986), as well as testimonies of burnt-out parents. Items (see Appendix A) were responded to on an 8-point scale: never, less than once a month, about once a month, a few times a month, once a week, several times a week, every day, several times a day. As shown in the Appendix A, the neglect scale covered both emotional neglect (e.g. *I sometimes neglect my child when s/he is sad, frightened or distraught*) and physical neglect (e.g. *I sometimes don’t take my child to the doctor when I think it would be a good idea*). The internal consistency of the neglect scale (Cronbach’s alpha) was 0.81. The violence scale encompassed physical violence (e.g. *I sometimes hurt my child with a belt, a hairbrush, a stick or some other object*) and psychological violence (e.g. *I sometimes tell my child that I will abandon him/her if s/he is not good*). The internal consistency of the violence scale (Cronbach’s alpha) was 0.82.

3.3.7. Social desirability

Given the variables investigated in this study, the short form of the Marlowe-Crowne social desirability scale (Reynolds, 1982) was used to control for socially desirable responses. It is composed of 12 items rated on a true-false response scale. The items are in the form of “*I’m always willing to admit when I make a mistake*”. Over the 12 items, seven were reversed so that the true response corresponded to high desirability. For example, the item “*I sometimes feel resentful when I don’t get my way*” was reversed. The 0 (no desirability) – 1 (desirability) scores were summed across the 12 items. The internal consistency (Cronbach’s alpha) was 0.61.

3.4. Data analyses

As normality is a critical assumption underlying most analyses performed here, the variables were normalized using log transformations. Then analyses were performed twice, once with the original variables and once with log-transformed variables. Because the results were similar, findings obtained from the analyses computed on original variables are presented. Descriptive statistics are also presented on original variables in order to facilitate the interpretation of the means. Concerning the first aim of this study, i.e. to examine the association between parental burnout and the possible consequences, we ran partial correlations controlling for the effect of social desirability. Regarding the second aim of this research, i.e., the comparison between the effects of parental burnout and job burnout on the consequences considered, we first replicated the above-mentioned analysis regarding *job* burnout (also controlling for the effect of social desirability); we then applied hierarchical multiple regression analyses to estimate the incremental validity of parental burnout in predicting consequences over and above job burnout. Values of tolerance (0.88) and VIF (1.14) indicate the absence of collinearity between the variables considered. The Durbin-Watson test confirms the assumption of independent error.

4. Results

Descriptive statistics (means and SDs) of the variables under consideration as a function of sociodemographic factors are presented in Table 1. The two forms of burnout are moderately related to each other $r = 0.35$, $p < .001$.

4.1. Parental burnout and its potential consequences

As shown in Table 2, parental burnout (global score) has a large association with parents' escape and suicidal ideations (explaining 26% of their variance) and with neglectful and violent behavior towards their child(ren) (explaining 30% and 26% of their variance respectively), a moderate association with sleep problems and consequences for the couple and a small association with addiction frequencies and average sleep efficiency. These effects are generally driven by emotional exhaustion and emotional distancing facets of parental burnout. Emotional exhaustion contributes more than emotional distancing to couples' conflicts, but emotional distancing has the largest association with both child-related consequences. As shown in Table 2, the results hold when controlling for social desirability. In order to check whether child neglect/violence can occur in all types of families, we also checked whether the results hold when additionally controlling for education level, income and addictions. The results did not lose any of their significance when these variables were partialled out.

4.2. Job burnout and its potential consequences

As shown in Table 2, job burnout (global score) has a small association with addiction frequency and dysfunctional consequences, average sleep efficiency and couple and child outcomes, and a medium association with escape and suicidal ideations and sleep problems. These effects are generally driven by the exhaustion facet.

4.3. Comparison between parental and job burnout

Parental and job burnout (global scores) seem to have statistically similar associations with parents' addiction frequencies (they both explain about 1% of its variance), $Z = 0.08$, $p > .05$, addictions' dysfunctional consequences, $Z = 1.44$, $p > .05$, parents' sleep problems (both explaining 7% of their variance), $Z = 0.00$, $p > .05$, and average sleep efficiency, $Z = 1.13$, $p > .05$. Parental burnout has a slightly larger association than job burnout with couples' conflicts (5% vs 1%), $Z = 3.44$, $p < .001$, and partner estrangement mindset (8% vs 1%), $Z = 4.95$, $p < .001$. As expected, the biggest discrepancies are detected for parents' escape and suicidal ideations (parental burnout explains 26% of its variance while job burnout explains only 6%), $Z = 8.85$, $p < .001$, and, to an even greater extent, for neglect (30% vs 3%), $Z = 12.14$, $p < .001$, and violence towards one's child(ren) (26% vs 1%), $Z = 12.58$, $p < .001$.

For both parental and job burnout, the loss of personal/professional accomplishment/efficacy dimension has the lowest association with parental, couple and child consequences. The emotional distancing dimension of parental burnout contributes more than the exhaustion dimension to child neglect, $Z = 8.05$, $p < .001$ and to child violence, $Z = 2.05$, $p < .001$. On the contrary, for job burnout, the dimension with the largest contribution to these consequences is emotional exhaustion.

4.4. Incremental validity of parental burnout in predicting child outcomes

The next step aimed to check the incremental validity of parental burnout for predicting each outcome over and above job burnout, under the hypothesis that the incremental value of parental burnout would be particularly high with regard to child-related outcomes. As expected, the largest incremental validity was found for neglect and violence towards one's child(ren). As shown in Table 3, job burnout, taken individually, has a significant effect on child neglect and child violence, but loses its significance once parental burnout is included in the model. Moreover, the addition of parental burnout (step 2) to the model considerably increases the variance explained by the model for both neglect ($\Delta R^2 = 0.28^{**}$ vs $\Delta R^2 = 0.05^{**}$) and violence ($\Delta R^2 = 0.27^{**}$ vs $\Delta R^2 = 0.03^{**}$).

Table 1
Descriptive statistics (means and SDs) of the variables under consideration as a function of sociodemographic factors.

	Possible Range	Min-Max	Pooled sample <i>N</i> (<i>SD</i>) <i>M</i> (<i>SD</i>)	Sex		Number of children			
				Mothers <i>N</i> = 1175 <i>M</i> (<i>SD</i>)	Fathers <i>N</i> = 376 <i>M</i> (<i>SD</i>)	1 <i>N</i> = 587 <i>M</i> (<i>SD</i>)	2 <i>N</i> = 610 <i>M</i> (<i>SD</i>)	≥ 3 <i>N</i> = 354 <i>M</i> (<i>SD</i>)	
PBI	0-132	0-125	32.53 (21.23)	32.84 (21.55)	31.7 (20.17)	28.48 (19.82)	33.92 (20.49)	36.86 (23.50)	
MBI	0-96	0-92	32.46 (16.80)	32.55 (16.81)	32.19 (16.79)	33.14 (17.02)	32.61 (16.58)	31.08 (16.80)	
Parent									
Escape and suicidal ideations	7-49	7-49	9.59 (4.67)	9.46 (4.56)	9.98 (4.99)	9.26 (4.16)	9.75 (4.88)	9.85 (5.08)	
Addiction frequencies	5-60	12-41	24.18 (4.33)	23.94 (4.20)	24.92 (4.61)	24.52 (4.37)	24.00 (4.24)	23.90 (4.36)	
Addictions' dysfunctional consequences	4-48	1-26	8.35 (3.81)	8.24 (3.86)	8.70 (3.66)	8.61 (3.91)	8.44 (3.82)	7.77 (3.58)	
Sleep problems	–	–1.77-2.99	–.10 (.92)	–0.06 (0.93)	–0.23 (0.88)	–0.09 (0.93)	–0.07 (0.89)	–0.18 (0.98)	
Average sleep efficiency	0-1	0.09–1.00	0.87 (0.11)	0.87 (0.11)	0.89 (0.10)	0.87 (0.11)	0.87 (0.10)	0.88 (0.10)	
Partner									
Conflicts	2-14	2-14	5.37 (2.50)	5.45 (2.50)	5.13 (2.49)	5.27 (2.45)	5.52 (2.53)	5.29 (2.52)	
Partner estrangement	5-40	5-35	7.81 (3.75)	7.57 (3.62)	8.55 (4.07)	7.72 (3.49)	8.06 (4.04)	7.52 (3.64)	
Child									
Neglect	17-136	18-90	28.73 (9.72)	28.20 (9.00)	30.38 (11.54)	26.72 (8.33)	29.46 (9.88)	30.81 (10.91)	
Violence	15-120	15-81	22.74 (7.58)	22.52 (7.07)	23.44 (8.97)	20.92 (6.37)	23.61 (7.79)	24.28 (8.44)	
Work Regimen									
No job									
<i>N</i> = 108									
<i>M</i> (<i>SD</i>)									
PBI	36.92 (24.05)	33.72 (20.92)	31.40 (20.97)	29.87 (20.67)	33.03 (21.56)	33.23 (21.11)	32.16 (22.05)	33.39 (20.46)	
MBI	42.50 (18.57)	32.03 (16.15)	31.54 (16.58)	33.62 (17.38)	33.23 (16.76)	31.30 (16.54)	32.66 (16.94)	31.64 (16.20)	
Parent									
Escape and suicidal ideations	9.87 (4.59)	9.66 (4.87)	9.52 (4.58)	9.78 (4.67)	9.68 (5.04)	9.43 (4.29)	9.59 (4.49)	9.60 (4.82)	
Addiction frequencies	23.34 (4.22)	23.58 (4.06)	24.59 (4.43)	24.56 (4.57)	23.98 (4.26)	24.19 (4.28)	24.08 (4.27)	24.41 (4.33)	
Addictions' dysfunctional consequences	7.67 (3.72)	8.02 (3.76)	8.60 (3.85)	8.91 (4.11)	8.28 (3.91)	8.18 (3.53)	8.40 (3.99)	8.17 (3.44)	
Sleep problems	0.46 (0.92)	–0.13 (0.90)	–0.15 (0.91)	0.04 (0.95)	–0.03 (0.95)	–0.23 (0.87)	–0.10 (0.91)	–0.17 (0.92)	
Average sleep efficiency	0.83 (0.12)	0.87 (0.11)	0.88 (0.10)	0.87 (0.11)	0.86 (0.12)	0.88 (0.10)	0.86 (0.12)	0.88 (0.09)	
Partner									
Conflicts	5.58 (2.80)	5.74 (2.53)	5.16 (2.42)	5.31 (2.45)	5.16 (2.42)	5.51 (2.55)	5.38 (2.46)	5.38 (2.46)	
Partner estrangement	7.82 (3.55)	7.64 (3.64)	7.89 (3.84)	7.80 (3.64)	7.74 (3.90)	7.88 (3.66)	7.77 (3.64)	7.81 (3.72)	
Child									
Neglect	29.76 (11.25)	28.32 (8.94)	28.83 (9.92)	27.69 (9.27)	28.62 (9.74)	29.21 (9.86)	28.57 (9.66)	29.12 (9.70)	
Violence	22.74 (7.91)	22.99 (7.38)	22.62 (7.65)	22.98 (8.02)	22.51 (7.14)	22.84 (7.77)	22.91 (7.99)	2.84 (7.28)	

Note: The database is available upon request to the first author for researchers who are interested to go deeper into the interactions.

Table 2

Partial correlations between parental burnout, job burnout and consequences for the parent, the couple and the child (all controlling for social desirability).

	Parental Burnout				Job Burnout			
	GS	EE	ED	LPA	GS	EE	Cy	LPE
Parent								
Escape and suicidal ideations	0.51**	0.43**	0.43**	0.30**	0.24**	0.24**	0.19**	0.09**
Addiction frequencies	0.12**	0.12**	0.13**	0.02	0.09**	0.17**	0.07*	−0.05*
Addictions' dysfunctional consequences	0.20**	0.17**	0.22**	0.06*	0.15**	0.24**	0.08*	−0.00
Sleep problems	0.26**	0.26**	0.19**	0.13**	0.26**	0.29**	0.16**	0.10**
Average sleep efficiency	−0.14**	−0.15**	−0.09**	−0.06*	−0.10**	−0.13**	−0.05	−0.02
Partner								
Conflicts	0.23** ^a	0.27** ^a	0.19** ^a	0.08*	0.11**	0.12**	0.05*	0.05*
Partner estrangement	0.29** ^a	0.24** ^a	0.26** ^a	0.16** ^a	0.12**	0.13**	0.11**	0.03
Child								
Neglect	0.55** ^a	0.37** ^a	0.59** ^a	0.31** ^a	0.18**	0.16**	0.14**	0.09*
Violence	0.51** ^a	0.40** ^a	0.46** ^a	0.32** ^a	0.11**	0.12**	0.08*	0.03

Notes. GS = global score ; EE = Emotional Exhaustion ; ED = Emotional Distancing ; LPA = Loss of Personal Accomplishment ; Cy = Cynicism ; LPE = Loss of Professional Efficacy.

* $p < .05$.

** $p < .001$.

^a Indicates that the correlation between parental burnout and the variable considered significantly differs from that of job burnout with that same variable (see details in the text).

5. Discussion

The main purpose of this study was to explore the relationship between parental burnout and three types of possible negative consequences in a large community sample of parents. We investigated the consequences of parental burnout for the parent (escape ideation and suicidal thoughts, frequency and negative consequences of addictions, sleep problems and average sleep quality), the couple (the degree of couples' conflicts and partner estrangement mindset) and the child (the presence of neglectful and violent behaviour towards the child(ren)). Our findings reveal that parental burnout and its three dimensions (emotional exhaustion, emotional distancing and loss of parental accomplishment and efficacy) is significantly related to all consequences considered. Moreover, compared to job burnout, parental burnout has a larger association with couples' conflicts and partner estrangement, and a much larger association with escape and suicidal ideation (26% of its variance explained by parental burnout vs only 6% explained by job burnout), child neglect (30% vs 3%) and child violence (26% vs 1%).

The most important finding concerns the very large association between parental burnout on neglectful and violent behavior towards the child(ren). Some studies have already pointed out the association between parenting stress and potential child maltreatment (Crouch & Behl, 2001; Rodriguez & Green, 1997), especially in high-risk contexts (Nair, Schuler, Black, Kettinger, & Harrington, 2003; Whipple & Webster-Stratton, 1991). Because the association we found between parental burnout and neglect and violence respectively does not lose any significance when controlling for education level, income and addictions, our results suggest that child maltreatment may occur in all kinds of families. Given that it has previously been shown that parental burnout is not at all typical of families with low socio-economic status (see Mikolajczak, Raes, Avalosse, & Roskam, 2018) – if anything, the reverse is true – this syndrome may represent a threat to children's well-being even in the most educated families.

The second relevant finding concerns the specific association between parental burnout and escape and suicidal ideations. Previous literature had already found a relationship between the burnout syndrome in the occupational domain and the desire to leave one's job (Alarcon, 2011; Jourdain & Chênevert, 2010; Schaufeli & Bakker, 2004) or the presence of suicidal thoughts (Olkinuora et al., 1990; van der Heijden et al., 2008), but this effect had never been compared to that of parental burnout. In the parental domain, abandoning one's children or suspending one's parental role is not an option, which certainly explains this stronger association with escape ideations, over and above job burnout.

While this study is the first to systematically explore the potential consequences of parental burnout for the parent, the couple and the child(ren), it is not exempt from limitations. The first and most important limitation is the cross-sectional nature of the study, which makes it impossible to ascertain causation direction. Many of the consequences investigated here could hide circular relationships with parental burnout. Assessing parental burnout and its consequences in a longitudinal cross-lagged design could be a starting point to clarify the relations involved, until such time as interventions are designed that will lead to decisive conclusions. The second limitation concerns the use of self-report measures. Because we controlled for the influence of social desirability through the analyses and because the current results are in perfect agreement with those of qualitative studies conducted by other members of our team (Hubert & Aujoulat, submitted for publication), we believe that our findings can be trusted. The third limitation is that, the use of self-reports in this study prevented us from investigating another important and likely consequence of parental burnout: health deterioration. Prospective large-scale studies show, for instance, that job burnout significantly increases the risk of common

Table 3
Hierarchical multiple regression analyses predicting parent, couple and child outcomes from job burnout and parental burnout.

	Escape and suicidal ideations		Addictions frequencies		Addiction dysfunctional consequences		Sleep problems		Average sleep quality		Couples' conflicts		Partner estrangement mind		Child neglect		Violence towards one's child(ren)	
	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1	0.09 ^{**}																	
MBI		0.28 ^{**}	0.02 ^{**}	0.14 ^{**}	0.04 ^{**}	0.19 ^{**}	0.08 ^{**}	0.28 ^{**}	0.01 ^{**}	-0.12 ^{**}	0.02 ^{**}	0.15 ^{**}	0.03 ^{**}	0.16 ^{**}	0.05 ^{**}	0.23 ^{**}	0.03 ^{**}	0.16 ^{**}
Step 2	0.21 ^{**}		0.02 ^{**}		0.04 ^{**}		0.04 ^{**}		0.02 ^{**}		0.06 ^{**}		0.08 ^{**}		0.28 ^{**}		0.26 ^{**}	
MBI		0.11 ^{**}		0.09 ^{**}		0.12 ^{**}		0.21 ^{**}		-0.07 [*]		0.05 [*]		0.05 [*]		0.03 [*]		-0.03 [*]
PBI		0.49 ^{**}		0.14 ^{**}		0.20 ^{**}		0.21 ^{**}		-0.14 ^{**}		0.27 ^{**}		0.30 ^{**}		0.56 ^{**}		0.55 ^{**}
Total R^2	0.30 ^{**}		0.04 ^{**}		0.08 ^{**}		0.12 ^{**}		0.03 ^{**}		0.08 ^{**}		0.11 ^{**}		0.33 ^{**}		0.29 ^{**}	

Note. MBI = Maslach Burnout Inventory (= Job Burnout); PBI = Parental Burnout Inventory.

** $p \leq .001$.

* $p < .05$.

infections (e.g. Mohren et al., 2003), cardiovascular disease (e.g., Toppinen-Tanner, Ahola, Koskinen, & Väänänen, 2009; see Melamed, Shirom, Toker, Berliner, & Shapira, 2006 for review), type II diabetes (Melamed, Shirom, Toker, & Shapira, 2006), severe injury (Ahola, Salminen, Toppinen-Tanner, Koskinen, & Väänänen, 2013) and premature death (Ahola, Väänänen, Koskinen, Kouvonen, & Shirom, 2010). Whether parental burnout has the same consequences as job burnout and whether it can predict these consequences over and above job burnout is a crucial issue. Future research that goes deeper into this issue is much needed.

Another consequence that is worth prospective investigation using external criteria is the impact of parental burnout on child development. It is currently unknown whether and to what extent children realize that their parent is in parental burnout, and whether this matters or not (one may expect more a detrimental effect on child development if the child feels responsible for his/her parent's state). It is likely, however, that short and long-term consequences of parental burnout will vary according to the presence/absence of child neglect and abuse, and according to the age of the child (young children may be more affected), the duration of parental burnout (a child may not notice any effect if the burnout lasts one month, but the situation may be very different if the burnout lasts one year) and the developmental domain under consideration.

6. Concluding comment

The findings of the current study corroborate published testimonies and clinicians' observations that parental burnout drastically increases escape and suicidal ideation, child neglect and child violence. Because these constitute direct threats to children's psychological and physical safety, the current study stresses the need to adopt not only a curative but also a preventive perspective on parental burnout.

Compliance with ethical standards

All authors declare that they have no conflict of interest.

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Written informed consent was obtained from all participants included in the study.

Acknowledgments

This study was funded by an FSR Research Grant from the Université catholique de Louvain. The funding source was not involved in the study design, the collection, analysis and interpretation of data, the writing of the report or the decision to submit the article for publication.

Appendix A. Items of Neglect and Violence Scales

Note: The study was conducted in French, so all the items are available in French upon request to the first author. For readers' convenience, we provide an English translation of the items below. The items coming from existing scales (see Measure section) have been reproduced in their original English form. The other items have been translated into English by a professional translator.

Items are followed with an 8-point frequency scale: never, less than once a month, about once a month, a few times a month, once a week, several times a week, every day, several times a day.

The items below are presented in the singular form. When the parent has more than one child, they must be presented in the plural form.

Neglect Scale:

- 1 When my child doesn't obey the rules (bedtime, getting up, politeness, etc.), I don't react.
- 2 I sometimes don't react when my child tells me something.
- 3 Sometimes I don't pay attention to my child being well dressed (suitably dressed for the weather, wearing clothes of the right size, neat and tidy, etc.).
- 4 I sometimes don't care about the quality of my child's meals.
- 5 I sometimes can't be bothered to ensure that my child has enough to eat (that s/he has a packed lunch and snacks for school, that s/he can cook something when I'm not there to do it, etc.).
- 6 I sometimes wait several days before going to collect medicines that are necessary for my child.
- 7 I sometimes ignore my child's feelings when s/he is sad, frightened or distraught.
- 8 Sometimes I don't encourage my child to take a bath or shower although I know I should.
- 9 Sometimes my child does something dangerous (e.g., not looking before crossing the street, spending time with people who are a bad influence, getting a lift with someone who drink-drives, etc.) and I don't care.
- 10 I don't care about my child's schooling and future.
- 11 I sometimes don't pay attention to my child when s/he talks to me.
- 12 Sometimes I don't show my child how much I love her/him (we don't cuddle, I don't tell her/him that I love her/him, etc.).
- 13 Sometimes I don't help my child when s/he really needs help (with her/his homework, making a decision, resolving a conflict, etc.).

- 14 Sometimes the house is not cleaned when it is really dirty.
- 15 The following question appears according to the age mentioned by the parent. If the child is young: I sometimes leave my child unattended (when I want to rest, when I am taking care of other things in the house, etc.). If the child is a teenager: Sometimes I don't know exactly where my child is (when he/she goes out, goes to a friend's house, etc.).
- 16 Sometimes I don't take my child to the doctor when I think it would be a good idea.
- 17 I am not attentive enough to dangers to my child at home (open fire, deep fryer, room ventilation, etc.).

Violence Scale

- 1 I sometimes threaten to abandon my child if s/he is not good.
- 2 I sometimes spank or slap my child.
- 3 When my child does something s/he is not allowed to do, I give her/him an angry look and then ignore her/him.
- 4 I sometimes denigrate my child.
- 5 I sometimes damage, destroy or throw objects which are precious to my child to punish her/him (toys, teddy bears, etc.).
- 6 I require my child to live up to my expectations (school success, sports performances, professional aspirations, etc.).
- 7 To get her/him to listen to me, I tell my child that I will love her/him even more if s/he does as I say.
- 8 Sometimes I shake my child.
- 9 I sometimes say things to my child that I then regret (threats, insults, use of silly nicknames etc.).
- 10 I sometimes lose my temper and fly off the handle when I'm with my child.
- 11 I sometimes hurt my child with a belt, a hairbrush, a stick or some other object.
- 12 I sometimes tell my child that I am going to leave and that s/he will not see me again if s/he continues to be difficult.
- 13 I sometimes mock my child.
- 14 When I am angry, I sometimes throw things at my child.
- 15 When my child is disobedient, I tell her/him that I don't love her/him anymore.

Appendix B. Supplementary data

Supplementary material related to this article can be found, in the online version, at doi:<https://doi.org/10.1016/j.chiabu.2018.03.025>.

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