



# Are all Burned Out Parents Neglectful and Violent? A Latent Profile Analysis

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Accepted: 12 October 2020 / Published online: 30 October 2020  
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## Abstract

Exposure to chronic parental stress can lead to parental burnout, a syndrome encompassing three dimensions: an overwhelming exhaustion from one's parental role, an emotional distancing from one's children, and a sense of parental ineffectiveness. The first goal of this study was to examine whether there were different profiles of parents based on their levels of exhaustion, emotional distancing, and inefficacy. The second goal was to investigate the association between these profiles and different forms of neglect and violence toward children (i.e., physical neglect, emotional neglect, physical violence, and verbal violence). 2767 parents who had at least one child living at home completed the survey. Latent profile analysis (LPA) was used to analyze the data. LPA identified five profiles of parents ("Not in parental burnout", "Inefficient", "At risk of parental burnout", "Emotionally exhausted and distant", and "Burned out parents"), which were associated with different levels and forms of neglect and violence. Profiles in which high levels of exhaustion were associated with high levels of emotional distancing showed much higher levels of neglect and violence. Results also show that physical violence remains lower than the other forms of violence or neglect. The results first suggest that exhausted parents need to be diagnosed and cared for before exhaustion leads to emotional distancing. They also suggest that burned out parents inhibit physical violence more than the other forms of violence and neglect.

**Keywords** Parental burnout · Emotional and physical neglect · Verbal and physical violence · Child abuse

## Highlights

- We examined 2767 parents using the Parental Burnout Inventory.
- We identified five profiles of parents: « Not in parental burnout », « Inefficient », « At risk of parental burnout », « Emotionally exhausted and distant », and « Burned out parents ».
- Our findings indicated that profiles in which high levels of exhaustion are associated with high levels of emotional distancing show higher levels of neglect and violence.
- The results suggest clinical intervention before parental exhaustion leads to emotional distancing.

Parenting can be wonderful, but it is also stressful (for reviews, see Abidin 1990; Crnic and Low 2002; Deater-Deckard 2014). When parents chronically lack the resources needed to handle stressors related to parenting, they may

develop parental burnout, a context-specific syndrome characterized by three main dimensions. The first dimension is an overwhelming exhaustion from one's parental role: parents 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 are less involved in parenting and in the relationship with their children; interactions are limited to functional/instrumental aspects at the expense of emotional aspects. The

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third dimension is a loss of efficacy and accomplishment in one's parental role: parents feel that they are not good parents anymore (Roskam et al. 2018; Roskam et al. 2017).

Parental burnout seems to have significant consequences, not only for the parent but also for the children. As a matter of fact, it drastically increases the frequency of neglectful and violent behaviors toward one's children (Mikolajczak et al. 2019), and this effect is much larger than that of job burnout (Mikolajczak et al. 2018). While parental burnout has a large effect on neglect and violence toward the child ( $r = 0.55$  and  $0.51$ , respectively), job burnout has only a weak to trivial effect ( $r = 0.18$  and  $0.11$ , respectively) (Mikolajczak et al. 2018). Parental burnout thus appears to have a specific effect on child neglect and violence toward one's children, which is not surprising considering that parenting is the source of the parent's suffering. While this study supports the importance of parental burnout and its consequential impact on children, research on parental burnout is still in its infancy. Many questions still need to be answered. Going deeper into the impact of parental burnout on parental neglect and violence as well as adding to the literature on parent factors related to maltreatment is crucial because these have in turn a significant impact on child development. Indeed, acts of maltreatment are known to have physical, psychological, social, and developmental repercussions on the children who are victims of them (e.g., Spinazzola et al. 2014; Teicher and Samson 2016; Watts-English et al. 2006). More specifically, neglected children were found to express more internalizing symptoms (e.g., depression, anxiety, suicidality, low self-esteem) while children exposed to violence are at greater risk of developing externalizing symptoms (e.g., anger, aggressive behavior, substance abuse) (Augusti et al. 2018; Hildyard and Wolfe 2002; Loos and Alexander 1997).

This study aims to extend the results of past studies on parental burnout and child abuse in two directions. The first one concerns *profiles* of parents. There may be different sub-populations of parents with different profiles on the sub-dimensions of parental burnout (i.e. exhaustion, emotional distancing, and loss of efficacy and accomplishment). The second one concerns the association of these profiles with different forms of neglect and violence, and in particular emotional neglect, physical neglect, verbal violence, and physical violence. So far, the only thing we know is that parental burnout linearly increases parental neglect and violence (Mikolajczak et al. 2018). However, parental burnout may not have the same effect on the different forms of neglect and violence, and different sub-populations of parents may be associated differently with these different forms.

## Profiles of Parents

Evaluating the effects of parental burnout and of each of its dimensions on neglect and violence is one way to assess how burnout is related to child abuse (see Mikolajczak et al. 2018). Nevertheless, this method overlooks the reality that dimensions do not exist in isolation and that the same global score on parental burnout can reflect very different combinations of dimension scores. One way to try to overcome this limitation would be to study interactions among dimensions. However, variable-centered analyses with three interacting variables are notoriously difficult to interpret and are less suitable for making inferences about individuals, because results are at the level of the variable, not of the person (Merz and Roesch 2011). Therefore, person-centered approaches, and latent profile analysis (LPA) in particular, are deemed more appropriate to describe how dimensions are organized within individuals (e.g., Berzenski and Yates 2011; Laursen and Hoff 2006; Von Eye and Bogat 2006; Von Eye and Wiedermann 2015). Moreover, profiles are practical in that they are often easier to interpret. These advantages of the person-centered approach make it increasingly used in various areas of psychological science (Bail et al. 2018; Christensen et al. 2018; Petrenko et al. 2012; Xu and Payne 2016; Zaidman-Zait et al. 2018; Zhang et al. 2018).

We therefore used the person-centered approach to investigate the existence of different profiles of parents based on their score on the three sub-dimensions of the parental burnout scale (i.e., exhaustion, emotional distancing, and loss of efficacy and accomplishment). To the best of our knowledge, person-centered approaches have never been used in the emergent field of parental burnout. However, it is a particularly interesting approach because it provides a more realistic perspective of how the three dimensions of parental burnout are experienced by the parents in our sample (Gabriel et al. 2015). Indeed, it makes it possible to take into account not only the intensity of each dimension of parental burnout but also how they combined among individuals. Since this study is the first to investigate the existence of profiles in the context of parental burnout, our investigations are essentially exploratory. However, there is an empirical reason to expect that the various dimensions of parental burnout could form profiles: The three dimensions do not covary perfectly (as reported in the validation article of the Parental Burnout Inventory, correlations between dimensions vary between 0.40 and 0.67). This theoretically leaves room for differential levels and combinations of the three dimensions, hence the possibility of profiles.

## Forms of Neglect and Violence

Although some authors distinguish between neglect and violence, other authors contest this dichotomization (e.g., Arata et al. 2007; Higgins and McCabe 2001). Authors nevertheless agree that there are different forms of neglect and violence (English et al. 2005), although defining them precisely is not always easy (e.g., Lau et al. 2005). Given our intention to go deeper into the results of Mikolajczak et al. (2018), we focused on four specific forms of child maltreatment: neglect of emotional needs (henceforth emotional neglect), neglect of physical needs (henceforth physical neglect), verbal violence and physical violence.

In general, neglect is defined as a failure or refusal to meet adequately the child's needs, potentially damaging his/her development (Hildyard and Wolfe 2002; Norman et al. 2012). When neglect concerns the child's emotional needs, it is referred to as emotional neglect (Kaplan et al. 1999; Teicher and Samson 2016). It can be, for example, not showing the child how much s/he is loved. When neglect concerns the child's health, nutrition, safety, hygiene or clothing, it is physical neglect (Kaplan et al. 1999; Teicher and Samson 2016; Theodore et al. 2007). It can involve, for example, not ensuring that the child has enough to eat.

Unlike neglect, which is defined by the notion of omission, violence implies the notion of aggression. In general, violence is defined as the perpetration of acts involving experience of physical, psychological or developmental harm or risk of harm (World Health Organization [WHO] 1996). When violence takes the form of verbal behavior that is disrespectful of the child's dignity or worth, it is named verbal violence (Manderino and Berkey 1997). Denigrating one's child is an example of verbal violence (Teicher et al. 2006). When violence consists of the intentional use of physical force, threatening the child's health, survival, development or dignity, it is named physical violence (Norman et al. 2012; WHO 2006). Shaking a child is an example of physical violence (Kaplan et al. 1999; Norman et al. 2012; Sachs-Ericsson et al. 2006; WHO 2006).

## The Present Study

The general objective of the present study was to examine whether all identified profiles of parents are neglectful and/or violent, and which form(s) neglect and violence take when parental burnout occurs. In the first part of the study, we sought to identify different sub-populations (i.e., profiles) of parents based on their levels of exhaustion, emotional distancing, and loss of efficacy and accomplishment. In the second part of the study, we investigated the association of these profiles with emotional and physical neglect as well as verbal and physical violence. This

second step also provides indirect evidence about the construct validity of our profiles. Indeed, if the identified profiles have different effects on outcomes (i.e., the different forms of neglect and violence), the very idea of considering different profiles is relevant. In other words, if different profiles are associated with different outcomes, the relevance of considering them as different from each other will be supported. It is of note that, like most person-centered studies, this research was conducted in an exploratory fashion.

## Method

### Participants

Data were collected from a sample of 4392 French-speaking parents. 1625 participants were withdrawn from the analyses because they did not fill the study until the end and therefore failed to complete the neglect and violence questionnaires (which were both at the very end). Therefore, the final sample was made of 2767 parents. Of these participants, 2188 were women (79.1%) and 579 were men (20.9%). The average age of the parents ranged from 21 to 77 years ( $M = 40.1$ ;  $SD = 8.5$ ). The average age of women and men ranged from 21 to 66 years ( $M = 39.1$ ;  $SD = 7.8$ ) and 24 to 77 years ( $M = 44.2$ ;  $SD = 9.7$ ), respectively. Most of participants came from Belgium (95.7%), followed by 3.4% French-speaking European parents, 0.6% non-European French-speaking parents and 0.3% missing values. Of these respondents, 49.3% were married, 31.1% were legally cohabiting and 19.6% were single. Each parent had from 1 to 10 children, aged from 0 to 46 years ( $M = 9.5$ ;  $SD = 7.1$ ). 16.7% of the children were in the age group 0–2 years old; 25.7% in the age group 3–5 years old; 20.1% in the age group 6–10 years old; 18% in the age group 11–15 years old; 11.6% in the age group 16–20 years old; 7.9% in the age group above 20 years old. All parents had at least one child still living at home (requirement to participate in the study). In terms of education, 5.6% did not complete high school, 16.9% held a high school degree, 39.9% of participants a bachelor's degree, 28.5% a master's degree, and 9.2% a PhD degree. 55.8% of respondents worked full-time, 19.2% part-time, 8% half-time and 17% were unemployed, retired, unable to work, annuitant, householder or on leave without pay.

### 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. 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.

## Measures

### Socio-demographic factors

Participants were asked about their gender, age, country, number of children, gender and age of each child, marital status, level of education and work time.

### Parental burnout

Parental burnout was assessed with the Parental Burnout Inventory (PBI) (Roskam et al. 2017). 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](http://www.mindgarden.com). Altered with permission of the publisher. User license paid. PBI is a 22-item self-report questionnaire consisting of three subscales: Emotional Exhaustion (8 items) (e.g., *Being a parent every day requires a great deal of effort*), Emotional Distancing (8 items) (e.g., *I am less attentive to my children's emotions*), and Loss of Efficacy and Accomplishment (6 items) (e.g., *As a parent, I handle emotional problems very calmly*, Reversed). 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). After reversing scores of personal accomplishment factor's items, the global score was obtained by summing the appropriate item scores, with higher scores indicating greater burnout. 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 Efficacy and Accomplishment.

### Neglectful and violent behavior toward one's child(ren)

Neglect and violence toward one's child(ren) were assessed with two sub-scales of the Parental Neglect Scale (i.e., emotional neglect and physical neglect) and two sub-scales of the Parental Violence Scale (i.e., verbal violence and physical violence) (Mikolajczak et al. 2018). Items were rated on an 8-point scale: never (0), less than once a month (1), about once a month (2), a few times a month (3), once a week (4), several times a week (5), every day (6), several times a day (7). Emotional neglect (e.g., *I sometimes don't pay attention to my child when s/he talks to me, I sometimes ignore my child's feelings when s/he is sad, frightened or distraught*; 4 items), physical neglect (e.g., *Sometimes I don't take my child to the doctor when I think it would be a good idea, I sometimes don't care about the quality of my child's meals*; 10 items), verbal violence (e.g., *I sometimes mock my child, I sometimes lose my temper and fly off the handle when I'm with my child*; 10 items), and physical violence (e.g., *I sometimes spank or slap my child, Sometimes I shake my child*; 5 items) had acceptable Cronbach's alphas (i.e., 0.67, 0.71, 0.78, and 0.67, respectively).

## Latent Profile Analysis

### Profiles of parents based on the Parental Burnout Inventory

Latent profile analysis (LPA) was performed using Mplus Version 7.4 (Muthén and Muthén 1998–2019) and its robust maximum likelihood estimator (MLR). Factor scores were used as input data (For further details, see Morin 2016). Factor scores saved from the measurement model of Parental Burnout Inventory ( $\chi^2(205) = 2770.23$ , RMSEA = 0.07, SRMR = 0.06, CFI = 0.90, TLI = 0.89) were thus used as inputs for the latent profile analysis. To preclude converging on local solutions, latent profiles were estimated with 3000 random start values, 100 iterations, and 100 solutions retained for final stage optimization (e.g., Morin 2016). We specified up to eight latent profiles in which the means of Emotional Exhaustion, Emotional Distancing, and Loss of Efficacy and Accomplishment were freely estimated across all profiles, and their variances were constrained to equality (e.g., Nguyen and Stinglhamber 2020). To determine the optimal number of profiles, we relied on the well-known model fit indexes: likelihood (LL), Akaike's information criterion (AIC), Consistent AIC (CAIC), Bayesian Information Criterion (BIC), Sample-Size Adjusted BIC (SSA-BIC), Adjusted Lo, Mendell and Rubin's likelihood ratio test (aLMR), Bootstrap likelihood ratio test (BLRT), and entropy (For further details, see Morin 2016). Furthermore, it is important to keep in mind that the theoretical conformity and meaning of the profile-solution picked need to be

**Table 1** Descriptive statistics and correlations among variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. Emotional exhaustion	16.00	12.40	(0.94)						
2. Emotional distancing	10.30	9.64	0.66***	(0.88)					
3. Loss of efficacy and accomplishment	8.70	7.23	0.30***	0.43***	(0.86)				
4. Emotional neglect	3.47	3.76	0.40***	0.64***	0.40***	(0.67)			
5. Physical neglect	4.83	5.58	0.31***	0.44***	0.21***	0.56***	(0.71)		
6. Verbal violence	6.84	6.66	0.46***	0.54***	0.37***	0.64***	0.49***	(0.78)	
7. Physical violence	1.27	2.26	0.29***	0.30***	0.23***	0.38***	0.35***	0.60***	(0.67)

*N* = 2767. Reliability alpha values are on the diagonal. Emotional Exhaustion, Emotional Distancing, and Loss of efficacy and Accomplishment were coded from “0” (never) to “6” (every day). Emotional neglect, physical neglect, verbal violence and physical violence were coded from “0” (never) to “7” (several times a day)

\*\*\**p* < 0.001

**Table 2** Fit statistics from the latent profile analysis models

Number of profiles	LL	FP	AIC	CAIC	BIC	SSA-BIC	Entropy	aLMR ( <i>p</i> )	BLRT ( <i>p</i> )
1	−11918.20	6	23848.41	23889.96	23883.96	23864.90	–	–	–
2	−10438.41	10	20896.81	20966.07	20956.07	20924.29	0.89	0.00	0.00
3	−9841.54	14	19711.08	19808.04	19794.04	19749.56	0.89	0.00	0.00
4	−9587.50	18	19211.00	19335.66	19317.66	19260.47	0.88	0.00	0.00
5	−9436.08	22	18916.17	19068.53	19046.53	18976.63	0.88	0.00	0.00
6	−9303.13	26	18658.26	18838.32	18812.32	18729.71	0.85	0.07	0.00
7	−9155.40	30	18370.80	18578.56	18548.56	18453.24	0.84	0.00	0.00
8	−9102.55	34	18273.10	18508.57	18474.57	18366.54	0.85	0.16	0.00

LL loglikelihood, FP free parameters, AIC Akaike information criteria, CAIC constant AIC, BIC Bayesian information criteria, SSA-BIC sample size adjusted BIC, aLMR adjusted Lo-Mendel-Rubin likelihood ratio, BLRT bootstrapped likelihood ratio test

taken into consideration when determining the number of profiles that are retained (Foti et al. 2012).

**Outcomes according to the profile of parents**

To include outcomes (i.e., auxiliary variables) into the model, we used the start values obtained from the profile-resolution to avoid any changes in the nature of the profiles, as recommended by Morin et al. (2011). Once again, we used factor scores saved from confirmatory factor analyses for outcomes. We used item-to-construct balance approach as a parceling technique (Little et al. 2002) to reduce the number of indicators for emotional neglect, physical neglect, verbal violence, and physical violence to three per factor. Using such a parceling technique makes it possible to control for inflated measurement errors from multiple indicators of latent variables (e.g., for a similar methodology, see Nguyen and Stinglhamber 2018). Finally, the measurement model of outcomes showed a good fit to the data ( $\chi^2(42) = 308.76$ , RMSEA = 0.04, SRMR = 0.04, CFI = 0.95, TLI = 0.93). The auxiliary variables (i.e., outcomes) were investigated via the automatic 3-step

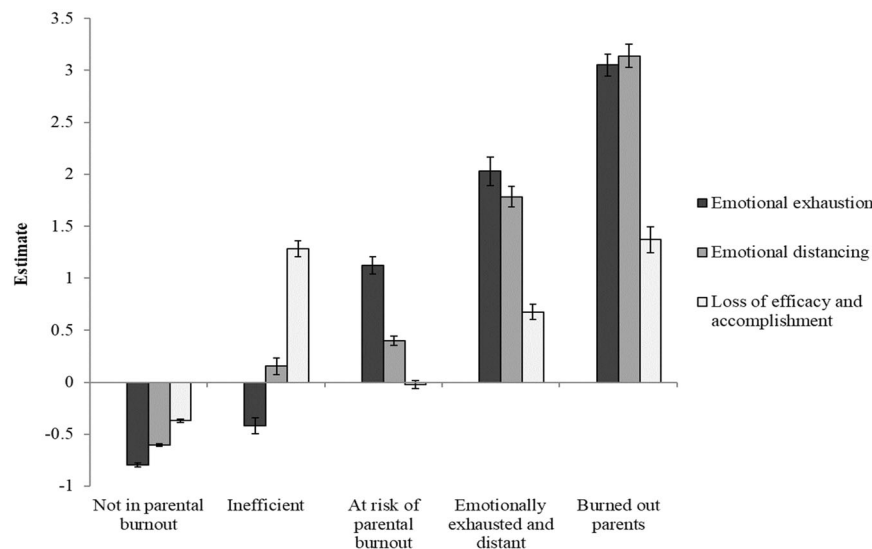
procedure using the “Auxiliary” function available in Mplus (Asparouhov and Muthén 2014). More precisely, we used the “BCH” function that compares the mean of each continuous outcome variable across latent profiles and test whether these outcomes are significantly different from each other (Bakk and Vermunt 2016).

**Results**

Means, standard deviations and correlations among variables are displayed in Table 1.

**Latent Profile Solutions**

Table 2 displays fit indices for one-profile to eight-profile models. Across these models, the LL, AIC, CAIC, BIC, SSA-BIC fit indices kept on suggesting the addition of profiles without converging on a clear solution. Since the fit indices failed to determine a preferable solution, we followed Morin et al.’s (2011) recommendations by plotting these indicators in the format of “elbow plots” to examine



**Fig. 1** Latent profiles of Parental Burnout Inventory

where the slope flattened, indicating the optimal number of latent profiles to retain. As the slopes were clearly leveling off between four and six profiles, we therefore paid more attention to the four-, five- and six-profile solutions. Across these profiles, the aLMR coefficient for the four- and five-profile solutions were significant whereas the aLMR value for the six-profile solution was not significant, suggesting that the five-profile solution should be preferred. However, because Foti et al. (2012) highlight that the theoretical conformity and meaning of the profile-solution picked need to be taken into consideration when determining the number of profiles, we further investigated the characteristics of these three solutions. We found that choosing a five-profile instead of a four-profile solution translated into the addition of a meaningful profile, while moving from a five-profile to a six-profile solution only led to the identification of two profiles that shared similar characteristics.

Based on the aforementioned rationales, we thus explored further the five-profile model. Table 2 indicates that the entropy of the five-profile solution was 0.879, which is considered as satisfactory (e.g., Foti et al. 2012; Morin et al. 2011). Furthermore, the average latent class probabilities, that refer to the probability that an individual classified into a latent profile belongs to that latent profile, for the five-profile model were 0.842, 0.870, 0.917, 0.955, and 0.899, which were above the cut-off criterion of 0.80 (e.g., Nylund et al. 2007). Accordingly, we adopted the five-profile model as the best solution based on both statistical and theoretical considerations.

Figure 1 displays the five-profile solution that was retained. As a reminder, values on the Y axis represent standard deviations from the mean. The first latent profile was the largest and described 59.16% of parents who report low levels of Emotional Exhaustion, Emotional Distancing, and low levels of Loss of Efficacy and Accomplishment and

were thus “*Not in parental burnout*”. The second profile represented by 9.04% of the parents was labeled “*Inefficient*” given that parents pertaining to this profile reported low levels of Emotional Exhaustion, moderate levels of Emotional Distancing, but high levels of Loss of Efficacy and Accomplishment. The third latent profile, named the “*At risk of parental burnout*” profile, characterized 20.06% of parents presenting moderately high levels of Emotional Exhaustion, moderate levels of Emotional Distancing, and average levels of Loss of Efficacy and Accomplishment. The fourth latent profile, labeled “*Emotionally exhausted and distant*”, included parents (8.49%) who reported high levels of Emotional Exhaustion and Emotional Distancing, and moderately high levels of Loss of Efficacy and Accomplishment. Finally, the fifth profile, named “*Burned out parents*”, included a relatively small proportion of parents (3.25%) who reported very high levels of Emotional Exhaustion and Emotional Distancing, and high levels of Loss of Efficacy and Accomplishment.

### Supplementary analysis

Because latent profiles of parental burnout are sensitive to the characteristics of the sample distribution, we tested whether the five-profile would hold in a sample in which parents having at least one adult child were excluded from the analyses. The results revealed a pattern similar to the profile solution described above.

### Outcomes of Latent Profiles

The relationships between the five latent profiles and neglect and violence toward one’s children are displayed in Table 3 and illustrated in Fig. 2. The results indicated that the parents

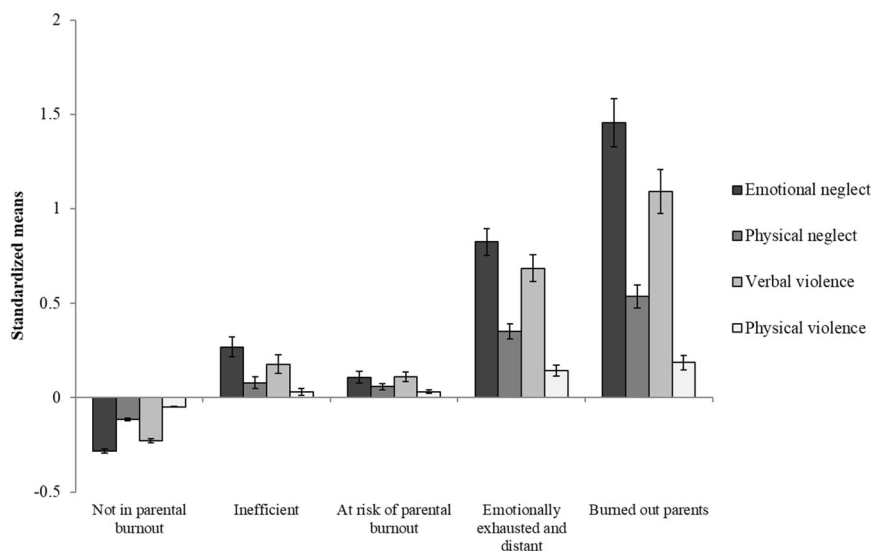
**Table 3** Equality tests of means across profiles for outcomes (BCH)

	NPB	IE	RPB	EED	BP	Chi-square	Significant differences
Emotional neglect	−0.28	0.27	0.11	0.82	1.46	663.08***	1 < 2 > 3 < 4 < 5
Physical neglect	−0.11	0.08	0.06	0.35	0.54	382.93***	1 < 2 = 3 < 4 < 5
Verbal violence	−0.23	0.18	0.11	0.68	1.09	515.89***	1 < 2 = 3 < 4 < 5
Physical violence	−0.05	0.03	0.03	0.14	0.19	176.79***	1 < 2 = 3 < 4 = 5

All values are standardized means. Angle bracket (equal sign) indicates that outcomes are (not) significantly different from each other between profiles at  $p < 0.05$

NPB not in parental burnout, IE inefficient, RPB at risk of parent burnout, EED emotionally exhausted and distant, BP burned out parents

\*\*\* $p < 0.001$

**Fig. 2** Standardized means of outcomes by latent profile

in the “*Not in parental burnout*” profile exhibited the least frequent neglectful and violent behaviors (i.e., lowest levels of outcomes). In addition, those pertaining to the “*Inefficient*” profile showed to be more emotionally neglectful than those in the “*At risk of parental burnout*” profile. In respect with physical neglect, verbal violence, and physical violence, both profiles were equal. When compared to the “*Emotionally exhausted and distant*” and “*Burned out parents*” profiles, parents in the “*Inefficient*” profile are less neglectful and violent regarding all the forms of neglect/violence. When compared to the “*Not in parental burnout*” profile, parents in the “*Inefficient*” profile are more neglectful and violent regarding all the forms. Moreover, parents in the “*At risk of parental burnout*” profile are more neglectful and violent than those in the “*Not in parental burnout*” profile. Concerning parents in the “*Emotionally exhausted and distant*” profile, members reported more emotional neglect, physical neglect, verbal violence, and physical violence than parents belonging to the “*Not in parental burnout*”, the “*Inefficient*”, and the “*At risk of parental burnout*” profiles. Finally, parents in the “*Burned out parents*” profile exhibited

the most neglectful and violent behaviors toward their children in comparison to all other latent profiles but were equivalent to parents in the “*Emotionally exhausted and distant*” profile with regard to physical violence.

## Discussion

Previous research showed that the more burned out a parent is, the more neglectful and violent they become toward their children (Mikolajczak et al. 2018). However, no studies have investigated this relation by considering the possible existence of sub-populations of parents. Therefore, it was unclear whether all burned out parents were neglectful and/or violent or not. In order to go deeper into this issue, we tried to identify profiles of parents based on their levels of Emotional Exhaustion, Emotional Distancing and Loss of Efficacy and Accomplishment (i.e., the three sub-dimensions of parental burnout). In a second step, we examined the association between these profiles and the different forms of child neglect and abuse.

## Profiles

The current research identified five profiles of parents based on their levels on the sub-dimensions of the parental burnout inventory. Since the exhaustion dimension is essential to evoke a burnout (Halbesleben and Bowler 2007), the first two profiles (i.e., “*Not in parental burnout*” and “*Inefficient*”) seem to represent parents who are not in burnout. The third profile is characterized by exhaustion but not as deeply as the last two profiles; emotional distancing is moderate and loss of efficacy and accomplishment is average. This profile could represent parents at risk of burnout. The percentage of parents in this category (i.e., 20.1%) is strongly consistent with the percentage of parents identified as “at risk of parental burnout” in an independent study conducted in 2018 by *La Ligue des Familles* [Belgian association for Families] on 1315 parents (20% exactly; *La Ligue des Familles* 2018). Finally, the last two profiles represent largely exhausted parents, where the three dimensions of burnout are present, with different intensities. These two profiles seem to confirm the current description of the parental burnout syndrome (e.g., Mikolajczak et al. 2018; Roskam et al. 2017) as well as the idea itself of a syndrome. Indeed, when exhaustion is present, the other two sub-dimensions are also present, even if they show different intensities. Parental burnout is therefore a syndrome that cannot be represented by a unique dimension isolated from the others.

Interestingly, although a longitudinal study would be required to confirm this, the last three profiles could reflect chronological steps in the development of parental burnout. In this case, the last three “profiles” would simply reflect different levels of severity. The literature in organizational psychology and on job burnout in particular has shown that job burnout could be conceived as a series of stages that would start with exhaustion, would continue with depersonalization, and eventually lead to loss of efficacy and accomplishment (e.g., Leiter and Maslach 1988). On the basis of this literature and the profiles observed here, one could assume that the parents begin by becoming exhausted (“*At risk of parental burnout*”). If exhaustion intensifies, parents will strive to save the little resources they have left and act in self-protective ways (Conservation of Resource theory; Hobfoll 1989). They will emotionally distance themselves from their child (“*Emotionally exhausted and distant*”). The emotional aspects of parenting will be abandoned in favor of the functional aspects (e.g., Hubert and Aujoulat 2018; Roskam et al. 2017). If the situation persists, these exhausted and distant parents, disengaging step by step from their role, will eventually feel inefficient (“*Burned out parents*”). This could be the last step of parental burnout. Longitudinal studies are needed to study the course of parental burnout across its three dimensions.

## Neglect and Violence

First, when we consider the effect of the identified profiles on the sub-categories of neglect and violence, we see that an exhausted parent (i.e., “*At risk of parental burnout*”) is not more neglectful or violent than a highly inefficient parent (i.e., “*Inefficient*”). Therefore, it would seem that emotional exhaustion alone is not sufficient to make an initially well-caring parent more neglectful or violent. In addition, compared to parents who are mostly exhausted (i.e., “*At risk of parental burnout*”), the levels of neglect and violence is more pronounced in parents who are very distant in addition to being very exhausted (i.e., “*Emotionally exhausted and distant*”). Indeed, the latter two profiles differ more in terms of emotional distancing than in terms of exhaustion and loss of efficacy and accomplishment (i.e., the difference of emotional distancing between the two profiles is one and a half higher than the difference of exhaustion and two times higher than the difference of loss of efficacy and accomplishment). It would therefore appear that, associated with high exhaustion and moderate loss of efficacy and accomplishment, it is essentially the sharp increase in emotional distancing that leads to a major increase in neglect and violence.

Then, when we only consider the profiles that represent parents in burnout, we see that *Burned out parents* is associated with higher levels of all forms of neglect and violence, except for physical violence which does not differ between the two profiles. This might indicate that despite high exhaustion, high emotional distancing and loss of efficacy and accomplishment, parents try to inhibit physically violent behaviors more than verbal violence or physical and emotional neglect. This is not so surprising as changes in the recent decades have led to a growing stigmatization of the use of spanking and corporal punishment (e.g., Damon 2005; Observatoire de la Violence Educative Ordinaire [OVEO] 2018; Salmons 2016) as well as to the adoption by several countries of a law prohibiting them (OVEO 2005). The progressive condemnation of physical violence could put such pressure on parents that they provide the necessary efforts to inhibit their violent behaviors despite significant exhaustion and distancing. Another explanation could be that this level of violence represented by the score of the two profiles mentioned above may be considered as the threshold never to be crossed. Parental identity could be so threatened if this line were crossed that parents try to provide the last efforts needed to maintain an acceptable image of themselves (Cast 2004).

## Limitations and Future Research

Despite its contributions, our study presents several limitations. The first one could be the use of the Parental Burnout Inventory (PBI) instead of the Parental Burnout Assessment (PBA). Indeed, while the first is an



adaptation of the Maslach Burnout Inventory (MBI) to parents (Roskam et al. 2017), the second was inductively (re)constructed based on parental testimonies (Roskam et al. 2018). Although both have been validated, the PBA is probably more appropriate for measuring parental burnout than the PBI. However, at the time we began collecting the data for this study, the PBA did not yet exist. Nonetheless, there is also an advantage of having used the PBI in this study: the latter being much closer to the MBI, it facilitates the comparison of the current results with the profiles identified among employees based on their scores on the MBI (e.g., Leiter and Maslach 2016; Mäkikangas and Kinnunen 2016).

Another limitation of our study that could be raised is the use of self-reported measures, both for parental burnout and for neglect and violence. Such measures are naturally subject to a social desirability bias. Nevertheless, previous studies have shown that the relation between parental burnout and neglect and violence holds even when controlling for social desirability (Mikolajczak et al. 2018). In addition, the effect of social desirability was minimized here by the anonymous nature of the study. Participants were informed that a computer procedure automatically disconnected their personal data (if they wished to give their email address for the lottery) from their responses to the questionnaires. This procedure protected both parents and researchers since, legally, any individual who is informed about a situation of abuse must report it to the competent authorities. Finally, it should be noted that even if self-reported measures are subject to bias, hetero-reported measures of parental burnout, neglect or violence would be even more so. There is currently no “objective” biomarker of parental burnout and “objective” measures of neglect or violence (i.e., reports to the police) lead to an underestimation of the frequency of these behaviors since the majority of them are never reported to the police.

Considering parents of different ages with young children, adolescents or adults, in different family situations (i.e. married, legally cohabiting or single), can be considered as another limitation. One could say that young children need much more parental time and attention than do adult children and that parenting tasks are different even if those adult children are still living at home. Furthermore, single parenthood may be more challenging than when one has a partner with whom to share the tasks. However, the associations between sociodemographic variables and parental burnout, in particular parent’s and child’s age or the type of family, were found to be low in previous research (Le Vigouroux and Scola 2018; Mikolajczak et al. 2018).

Despite these limitations, the current study opens exciting perspectives for future research. Indeed, given the important role of emotional distancing in parental neglect and violence, it

would be interesting to go deeper into the cognitive and emotional processes mediating (and moderating) the effect of emotional distancing on neglect and violence. We believe that studying the role of empathy, for instance, would constitute a very promising avenue for future research.

## Concluding Comment

Five profiles were distinguished based on the three sub-dimensions of the Parental Burnout Inventory: parents who are not in burnout, parents who are not in burnout but feel very inefficient, parents who are exhausted but not very distant nor inefficient, parents who are very exhausted and very distant but not very inefficient and, finally, parents who are very exhausted, very distant and very inefficient. These profiles were associated with different levels and forms of neglect and violence. Profiles in which high levels of exhaustion were associated with high levels of emotional distancing showed much higher levels of neglect and violence. These results suggest that exhausted parents need to be diagnosed and cared for before exhaustion leads to emotional distancing.

**Acknowledgements** The study was funded by an FSR-2016 grant awarded to MM and IR. Open Access funding enabled and organized by Projekt DEAL.

## Compliance with Ethical Standards

**Conflict of Interest** The authors declare that they have no conflict of interest.

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

**Informed Consent** Informed consent was obtained from all individual participants included in the study.

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