

Is Parental Burnout Distinct From Job Burnout and Depressive Symptoms?



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Abstract

Parenting can be difficult, and when difficulties are experienced as being chronic or overwhelming, parental burnout may occur. It is not yet clear, however, to what extent parental burnout can be distinguished from job burnout (which shares core definitional features) or depressive symptoms (which often co-occur with parental burnout). Here we present two studies ($N = 3,482$) that suggest the distinctiveness of parental burnout. First, items aimed at measuring parental burnout, job burnout, and depressive symptoms loaded on different factors. Second, although job burnout, parental burnout, and depressive symptoms had some common consequences (e.g., problematic alcohol use, disordered sleep, somatic complaints), parental and job burnout also each had specific consequences (e.g., parental neglect and parental violence for parental burnout; intent to leave the company for job burnout) that are not explained by depressive symptoms. These results support the distinctiveness of parental burnout and the added value of this construct.

Keywords

parental burnout, job burnout, parenting, stress, depression, work

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Parenting is widely thought to be one of the most challenging jobs a person can ever undertake. From the birth of their children or even sometimes from their conception, most parents experience stress in their parental role (for reviews, see Crnic & Low, 2002; Deater-Deckard, 2008). Being a parent requires managing daily hassles (e.g., homework, driving), acute stressors (e.g., sibling conflict, falls, or accidents), and often also chronic stressors (e.g., learning disabilities, difficulties during adolescence).

When parents lack the resources needed to handle stressors related to parenting, they may develop *parental burnout*, a state of intense exhaustion related to their parental role in which they become emotionally detached from their child or children and doubtful of their capacity to be a good parent (Mikolajczak & Roskam, 2018; Roskam, Raes, & Mikolajczak, 2017). Burned-out parents feel so drained by parenting that when they get up in the morning and have to face another day with their children, they feel exhausted. As a result, they become emotionally distant from their children: They take care of their children on autopilot

and are no longer able to show their children how much they love them. Accordingly, they do not feel that they are good parents anymore and lose the pleasure of being with their children (Hubert & Aujoulat, 2018; Roskam, Brianda, & Mikolajczak, 2018).

Until recently, research on parental burnout was confined to parents of severely ill children (e.g., Lindahl Norberg, 2007, 2010; Lindström, Aman, & Norberg, 2010, 2011; Weiss, 2002). Now, however, the growing field of parental burnout has begun to consider a much wider range of parents. Beyond psychometric research, most efforts have been devoted to better understanding the risk factors for parental burnout. Findings have shown

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that parents are at greatest risk when they aim to be perfect parents (Kawamoto, Furutani, & Alimardani, 2018), are neurotic or lack emotion and stress-management abilities (Lebert-Charron, Dorard, Boujut, & Wendland, 2018; Le Vigouroux, Scola, Raes, Mikolajczak, & Roskam, 2017; Mikolajczak, Raes, Avalosse, & Roskam, 2018), lack emotional or practical support from the coparent or from the social network more broadly (Lindström et al., 2011; Mikolajczak, Raes, et al., 2018; Séjourné, Sanchez-Rodriguez, Leboulenger, & Callahan, 2018), have poor child-rearing practices (Mikolajczak, Raes, et al., 2018), have children with special needs that interfere with family life (Gérain & Zech, 2018; Lindahl Norberg, 2007; Lindström et al., 2010), or work part-time or are stay-at-home parents (Lebert-Charron, et al., 2018; Mehauden & Piroux, 2018; for a review of risk and protection factors for parental burnout and their respective weights, see Mikolajczak & Roskam, 2018). Researchers know much less about the consequences of parental burnout, but what is known suggests that parental burnout is a serious condition with pervasive effects on the parent (increase in addictive behaviors, sleep disorders, and family escape and suicidal ideations), on the couple (e.g., conflicts, adultery), and on the children (child neglect and violence; Mikolajczak, Brianda, Avalosse, & Roskam, 2018; Mikolajczak, Gross, & Roskam, 2019).

Although interest in parental burnout is growing rapidly (a hundred researchers from 40 countries recently formed a consortium to study parental burnout¹), it is still unknown whether parental burnout is distinct from related constructs. In particular, it is unclear whether and to what extent parental burnout can be distinguished from job burnout (which shares core definitional features) or depressive symptoms (which often co-occur with parental burnout; Kawamoto et al., 2018; Lebert-Charron et al., 2018; Van Bakel, Van Engen, & Peters, 2018). At a time of unprecedented interest in parental burnout, it is crucial to assess the distinctiveness and added value of parental burnout in relation to both job burnout and depressive symptoms (Bianchi, Schonfeld, & Laurent, 2015a, 2015b, 2019; Schonfeld & Bianchi, 2016).

Distinctiveness of Parental Burnout and Job Burnout

Job burnout results from prolonged exposure to high job demands in the absence of requisite resources (Bakker, Demerouti, & Verbeke, 2004; Demerouti, Bakker, Nachreiner, & Schaufeli, 2000; Maslach, Schaufeli & Leiter, 2001). The most widely used conception defines job burnout as a tridimensional syndrome including a state of emotional and physical exhaustion, a detached attitude toward the recipients of one's services, and a feeling of professional inadequacy that leads to a decreased sense of personal accomplishment (Maslach

et al., 2001; Maslach, Jackson, & Leiter, 2010). Research has shown that job burnout is associated with a host of negative outcomes, such as sleep disorders (Armon, Shirom, Shapira, & Melamed, 2008), alcohol abuse (e.g., Ahola et al., 2006; Pedersen, Sørensen, Bruun, Christensen, & Vedsted, 2016), health deterioration (for review, see Shirom, Melamed, Toker, Berliner, & Shapira, 2005), low job satisfaction, and strong intention to leave the company (for a meta-analysis, see Alarcon, 2011).

As noted above, the dimensions of parental burnout (i.e., exhaustion, detachment, feelings of inefficacy)² are the same as in job burnout—hence the name *burnout*—but the context is different (i.e., parenting vs. job). But does the context in which burnout originates matter? To what extent does burnout remain “confined” to one sphere of life? Whether burnout is context-bound or context-free has been a topic of controversy since the very emergence of the job-burnout construct (e.g., Kristensen, Borritz, Villadsen, & Christensen, 2005; Maslach et al., 2001; Pines & Aronson, 1981). Some researchers have viewed burnout as a context-free phenomenon: a state of mental, emotional, and physical exhaustion that would be evident in all spheres of life (e.g., Malach-Pines, 2005; Pines & Aronson, 1981). Others have viewed it as a context-bound phenomenon (Bakker et al., 2000; Schaufeli, Leiter, & Maslach, 2009).

Deciding whether burnout is context-bound or context-free requires that researchers investigate burnout in two clearly differentiated but equally important contexts (e.g., job and parenting) in the same study using validated and structurally similar instruments (e.g., for job burnout, the Maslach Burnout Inventory, or MBI, Maslach et al., 2010; and for parental burnout, the Parental Burnout Inventory, or PBI, Roskam et al., 2017). The recent development and validation of the PBI made that possible. If burnout is context-free (i.e., originates in one sphere of life but then equally affects all spheres of life), then job-burnout and parental-burnout items should load on the same latent variable. They should also have similar consequences on the parents, their spouse, their children, and their work. In this case, the construct–diagnosis of parental burnout would have no added value. By contrast, if burnout is context-bound (i.e., originates in one sphere of life and expresses itself more strongly in that sphere), then job-burnout and parental-burnout items should load on different factors. If so, these two constructs–diagnoses might be expected to have at least partially distinct consequences.

Distinctiveness of Parental and Job Burnout in Relation to Depressive Symptoms

Depressive symptoms include a pervasive sadness or a markedly diminished interest or pleasure in all or almost all activities and is associated with several other

symptoms, such as feelings of worthlessness or excessive guilt, difficulties concentrating or indecisiveness, psychomotor agitation or retardation, fatigue, insomnia or hypersomnia, weight gain or weight loss, and recurrent thoughts of death (International Classification of Disorders, or ICD-10, World Health Organization, 1993; fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders*, or *DSM-5*, American Psychiatric Association, 2013). According to both the *DSM-5* and the ICD-10, depressive symptoms are pervasive and uncontextualized (the ICD-10 says that “the lowered mood varies little from day to day, and is often unresponsive to circumstances, yet may show a characteristic diurnal variation as the day goes on,” p. 95) and are measured accordingly in all the most widely used inventories of depressive symptoms (e.g., Beck Depression Inventory, Beck, Steer, & Carbin, 1988; Center for Epidemiologic Studies Depression Scale, Radloff, 1977; Hospital Anxiety and Depression Scale, Zigmond & Snaith, 1983; Hamilton Depression Rating Scale, Hamilton, 1960; Patient Health Questionnaire–Depression, or PHQ, Kroenke et al., 2009).

Research has shown that depressive symptoms (and not only major depression) are associated with negative outcomes (Katon, 2003), some of which are common with burnout, such as sleep disorders (for a meta-analysis, see Tsuno, Besset, & Ritchie, 2005), alcohol abuse (for a meta-analysis, see Lai, Cleary, Sitharthan, & Hunt, 2015), health deterioration (e.g., Moussavi et al., 2007), or couple conflicts (e.g., Shelton & Harold, 2008). These common consequences make it all the more important to investigate the separability of parental burnout, job burnout, and depression.

If burnout turns out to be context-free, it could be difficult to distinguish it from depression (Bianchi et al., 2015a; Schonfeld & Bianchi, 2016), and burnout and depression might be expected to have roughly the same consequences. Parental burnout would then have no added value over the constructs of job burnout and depression. On the contrary, if burnout is context-bound, then parental and job burnout would be expected to differ from depressive symptoms. These conditions might then have partially different consequences. If parental burnout predicts important consequences that are not predicted by job burnout or depression, then the construct would have added value, and more research into it would be warranted.

The Present Research

The goal of the present research was to examine the distinctiveness of parental burnout in relation to job burnout and depressive symptoms. The most widely used means of examining distinctiveness between

psychological constructs is factor analysis: A construct is deemed distinct from another if its indicators load on a different and interpretable factor (e.g., Kudielka, von Känel, Gander, & Fischer, 2004). Although this method is often considered sufficient, an additional and more clinically useful way to test construct distinctiveness is by assessing distinctiveness in terms of associations with other constructs (Uliaszek, 2015). Among these methods, the most clinically and practically relevant are consequences. A construct is deemed distinct from another if it has partially distinct consequences (Campbell et al., 2013). Yet it will be judged to have clinical added value only if the consequences in question are clinically important. We therefore assessed the distinctiveness of parental burnout in relation to job burnout and depressive symptoms in two ways: factorial distinctiveness and consequence distinctiveness. In Study 1, we focused on factorial distinctiveness between parental and job burnout. In Study 2, we replicated Study 1 in a different sample to further assess the distinctiveness of both forms of burnout in relation to depressive symptoms and employed a prospective design to test whether the three constructs were associated with the same or different outcomes.

Given prior work as well as theoretical considerations, we hypothesized that parental burnout would not totally overlap with job burnout or depressive symptoms. Two studies that are consistent with this expectation are the studies of Kawamoto et al. (2018) and Van Bakel et al. (2018), who found correlations of .35 and .29, respectively, between parental burnout and job burnout and of .41 and .44, respectively, between parental burnout and depression. If these constructs overlap, the correlations would have been larger (a correlation of .44 indicates that the constructs share only 19% variance). Given these results, we expected to find evidence for factorial distinctiveness between these constructs. Moreover, although we expected the three constructs to have common consequences (e.g., sleep disorders, somatic disorders, addictive behaviors), we expected that parental and job burnout would have more pronounced consequences in the specific sphere of life from which they originated. Accordingly, parental burnout would have more pronounced consequences at home and job burnout more pronounced consequences at work.

Study 1

Factorial distinctiveness of parental burnout and job burnout

In this study, we aimed to test the factorial distinctiveness of parental and job burnout using structurally similar instruments (i.e., the MBI and the PBI). If burnout is

context-free, then job burnout and parental burnout items should load on the same latent variable. Entering all job-burnout and parental-burnout items in the same factor analysis would give rise to three factors (Exhaustion, Detachment, Inefficacy) that would form one latent factor (Burnout). By contrast, if burnout is context-bound, then job-burnout and parental-burnout items should load on different factors. Entering all job-burnout and parental-burnout items in the same factor analysis would give rise to six factors (Exhaustion-Work, Exhaustion-Parenting, Detachment-Work, Detachment-Parenting, Inefficacy-Work, Inefficacy-Parenting) that would form two latent factors (Job Burnout and Parental Burnout). The study was approved by the Institutional Review Board and was carried out in accordance with the provisions of the Declaration of Helsinki of the World Medical Association (2013).

Method

Participants. Participants were informed about the survey through the network of the largest health mutual in Belgium, social networks, websites, schools, pediatricians, and word of mouth. To avoid self-selection bias, participants were not informed that the study was about parental burnout. Parents were eligible to participate only if they had at least one child still living at home. They were invited to complete the survey online on Qualtrics after giving informed consent. The informed consent they signed allowed them to withdraw at any stage of the questionnaire without having to justify their withdrawal. They were also assured that data would remain anonymous.

A sample of 2,608 French-speaking parents (78.8% women) completed the study. The women's ages ranged from 21 to 64 years (mean age = 39.31; $SD = 7.64$), and the men's ages ranged from 24 to 66 years (mean age = 43.05; $SD = 8.48$). The majority of the sample came from Belgium (96.1%), a minority from other French-speaking European countries (3.3%), and the remaining 0.6% from non-European French-speaking countries. Overall, the participants had from 1 to 10 children, ages 0 to 38 years (mean age = 8.49; $SD = 6.70$). The sample was relatively representative: 21.1% of the participants were educated to secondary level, 40.6% had a first degree from university or college, 28.9% a master's degree, and 9.3% had a PhD or MBA degree; 23% had a net monthly household income lower than €2,499 (\$2,840), 44.2% between €2,500 and €3,999 (\$2,840–\$4,540), 23.9% between €4,000 and €5,499 (\$4,540–\$6,240), and 8.9% higher than €5,500 (\$6,240).

Participants who completed the questionnaire (see Measures section below) had the opportunity to enter a lottery with a chance of winning €300 (\$340), a stay for two people in a hotel, or amusement park or wellness center tickets. Participants who wished to participate in

the lottery had to provide their e-mail address, but an electronic procedure ensured that the e-mail addresses were automatically disconnected from the questionnaires and directly encoded in a distinct data file.

Measures. Questionnaires were completed with the forced-choice option in Qualtrics, which ensured a data set with no missing values.

Parental burnout was assessed with the PBI³ (Roskam et al., 2017), an adaptation of the MBI to parenting. The PBI includes 22 items that form three subscales: emotional exhaustion (8 items; e.g., "I feel emotionally drained by my parental role"), emotional distancing/detachment (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 feelings of inefficacy (6 items; e.g., "I accomplish many worthwhile things as a parent," reverse-scored). PBI items were rated on the same 7-point Likert scale as in the original MBI (0 = *never*, 1 = *a few times a year or less*, 2 = *once a month or less*, 3 = *a few times a month*, 4 = *once a week*, 5 = *a few times a week*, 6 = *every day*). The global score (Cronbach's $\alpha = .93$ in the present sample) was computed by summing the item scores after reversing those of the personal accomplishment factor so that higher scores indicate greater burnout.

Job burnout was assessed with the Maslach Burnout Inventory–General Survey (MBI-GS; Maslach et al., 2010). The MBI is a widely used 16-item questionnaire encompassing three factors: Emotional Exhaustion (5 items), Cynicism/Detachment (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 (0 = *never*, 1 = *a few times a year or less*, 2 = *once a month or less*, 3 = *a few times a month*, 4 = *once a week*, 5 = *a few times a week*, 6 = *every day*). The global score (Cronbach's $\alpha = .86$ in the present sample) was computed by summing the item scores after reversing those of the Professional Efficacy factor so that higher scores indicate greater burnout.

Statistical analyses. The data were analyzed using both exploratory factor analyses (EFA) and confirmatory factor analyses (CFA). We randomly split the sample into two subsamples of 1,323 and 1,285 participants in order to compute EFA and CFA on two different subsamples. The reason why the subsamples do not have the same size is that the division of the sample into two subsamples was made randomly using the option "select cases – random sample of cases – approximately 50% of all cases" in SPSS.

The EFA was performed on the first subsample (1,323 parents) as follows: The 22 items of the PBI and the 16

items of the MBI were entered together in the analysis and subjected to EFA using maximum likelihood estimation with oblimin rotation. Most items of the MBI and PBI are similar except that they are anchored in the work and parenting contexts, respectively (e.g., “I feel emotionally drained from my work”; “I feel emotionally drained by my parental role”). Thus, if items measuring job burnout did not cluster with those measuring parental burnout, this could not be attributed to measurement differences. In the first—fully exploratory—EFA, we examined which factor solution would emerge spontaneously from the data. Thus, we neither set the number of factors to extract nor “forced” a six-factor solution; all factors with eigenvalues greater than 1 were admitted. The result of the EFA shown in the Results section corresponds to the pattern matrix of factor loadings. Second, we compared the six-factor solution that spontaneously emerged from the fully exploratory EFA with more parsimonious solutions. Indeed, if job burnout and parental burnout constructs are not really distinct from each other (or if some of their dimensions are not really distinct from each other), one would expect that solutions with a lower number of factors (in which job-burnout and parental-burnout items load on the same factor) would represent a better fit to the data. We therefore compared the six-factor solution with one-, two-, three-, four-, and five-factor solutions.

CFAs were computed on the second subsample (1,285 parents) using structural equation modeling software Stata 15 (StataCorp, College Station, TX). Analyses were conducted on the basis of the covariance matrix and using maximum likelihood estimation with Satorra-Bentler correction for nonnormal data (Satorra & Bentler, 1994); indeed, skewness and kurtosis indicated that several items displayed deviations from normality. Conceptually, these deviations from normality make sense: Like most mental health indicators, burnout is expected to present an asymmetric distribution (i.e., to be positively skewed). Several goodness-of-fit indices were used to determine the acceptability of the models: the root mean square error of approximation (RMSEA), the standardized root mean square residual (SRMR), the comparative fit index (CFI), and the Tucker-Lewis index (TLI). For CFI and TLI, values close to .90 or greater are acceptable to good. RMSEA and SRMR should preferably be less than or equal to 0.08 (Hu & Bentler, 1999).

We tested and compared three models in CFA. The first model that we tested is the model that would be expected if parental burnout and job burnout were different constructs. In this model (for a schematic representation, see Fig. 1), the 38 items of job-burnout and parental-burnout inventories formed eight latent variables:

six first-order factors (Exhaustion-Work, Detachment-Work, Inefficacy-Work, Exhaustion-Parenting, Detachment-Parenting, Inefficacy-Parenting), and these latent variables formed two second-order factors: Job Burnout (indexed by Exhaustion-Work, Detachment-Work, Inefficacy-Work) and Parental Burnout (indexed by Exhaustion-Parenting, Detachment-Parenting, Inefficacy-Parenting). The second model that we tested is an alternative model in which the 38 items of job-burnout and parental-burnout inventories formed seven latent variables: the six first-order factors described above and only one second-order factor (Burnout). The third model tested is the model that would be expected if parental burnout and job burnout formed one and the same construct: burnout. In this model (for a schematic representation, see Fig. S1 in the Supplemental Material available online), the 38 items of job-burnout and parental-burnout inventories formed four latent variables: three first-order factors: Exhaustion (indicated by the corresponding items from the MBI and the PBI), Detachment (indicated by the corresponding items from the MBI and the PBI), and Inefficacy (indicated by the corresponding items from the MBI and the PBI); all three formed one second-order factor: Burnout.

Results

Exploratory factor analysis. As can be seen in Table 1, the results of the first EFA were clear: A six-factor solution spontaneously emerged from the data in which the job burnout and parental burnout items formed six different factors (Exhaustion-Work, Exhaustion-Parenting, Detachment-Work, Detachment-Parenting, Inefficacy-Work, Inefficacy-Parenting). There was only one cross-loading, and it was within constructs and not between constructs. Moreover, as shown in Table S1 in the Supplemental Material, this six-factor solution clearly fit the data better in terms of χ^2 and percentage of variance explained than any more parsimonious solution, which suggests that job-burnout and parental-burnout items do not load on the same factors.

Confirmatory factor analysis. Given the results of the EFA, we built a first measurement model including eight latent variables: six first-order factors (Exhaustion-Work, Detachment-Work, Inefficacy-Work, Exhaustion-Parenting, Detachment-Parenting, Inefficacy-Parenting) forming two second-order factors (Job Burnout and Parental Burnout). As shown in Figure 1, the indicators of the first-order factors consisted of the items of the corresponding subscales in the MBI and PBI (five, eight, and five items and eight, six, and six items, respectively). Model fit indices indicated that this first model had good fit to the data (CFI = .94,

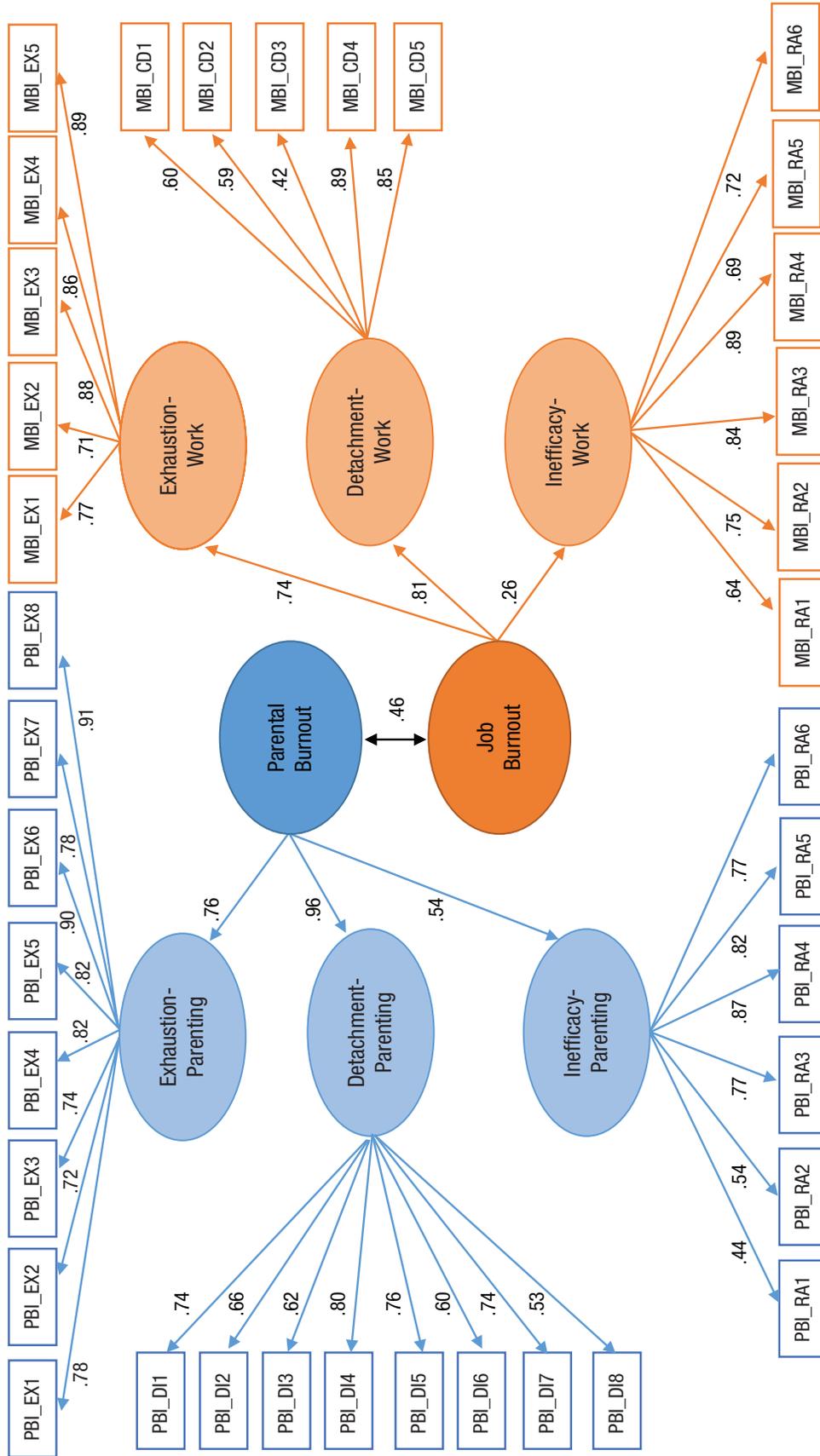


Fig. 1. Confirmatory factor analysis on the items of the Parental Burnout Inventory (PBI) and the Maslach Burnout Inventory (MBI; Study 1; $N = 1,285$). EX = Exhaustion, DI = Distancing, CD = Cynicism-Detachment, RA = Reversed Accomplishment. Coefficients are standardized coefficients. Fit indices: comparative fit index = .94, Tucker-Lewis index = .93, standardized root mean square residual = .07, root mean square error of approximation = 0.04.

Table 1. Exploratory Factor Analysis of Parental Burnout Inventory and Maslach Burnout Inventory Items (Study 1; *N* = 1,323 parents)

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6
Exhaustion-Parenting1	.87	.03	-.06	.03	-.09	.02
Exhaustion-Parenting2	.85	.01	-.03	.06	-.14	.05
Exhaustion-Parenting3	.82	.00	.01	-.03	.08	.04
Exhaustion-Parenting4	.79	-.02	.00	.00	-.03	.10
Exhaustion-Parenting5	.78	.02	.00	-.04	.09	.06
Exhaustion-Parenting6	.74	-.02	.01	-.11	.15	.02
Exhaustion-Parenting7	.72	.03	.02	-.07	.15	-.06
Exhaustion-Parenting8	.64	.07	.03	-.01	.18	-.01
Detachment-Work1	.07	.89	-.03	-.01	-.05	-.02
Detachment-Work2	.06	.87	-.07	.00	-.01	-.03
Detachment-Work3	-.01	.50	-.15	.07	.08	.15
Detachment-Work4	-.03	.48	-.04	.01	.03	.27
Detachment-Work5	-.01	.41	.14	-.03	.04	.10
Inefficacy-Work1	.02	-.07	.81	.02	-.01	-.09
Inefficacy-Work2	-.04	.11	.81	-.03	-.05	-.02
Inefficacy-Work3	-.02	-.06	.80	.08	.04	-.03
Inefficacy-Work4	-.01	.13	.75	-.02	.01	-.05
Inefficacy-Work5	.02	-.24	.66	.05	.01	.02
Inefficacy-Work6	.02	-.02	.53	.04	-.04	.19
Inefficacy-Parenting1	-.16	.05	.02	.76	.00	-.04
Inefficacy-Parenting2	-.02	.09	.05	.75	-.02	-.09
Inefficacy-Parenting3	-.02	.02	.06	.75	-.02	-.01
Inefficacy-Parenting4	-.10	.07	.06	.68	.01	-.06
Inefficacy-Parenting5	.08	-.08	.01	.67	.01	.04
Inefficacy-Parenting6	.10	-.06	-.07	.59	.00	.05
Detachment-Parenting1	-.10	-.01	-.01	-.05	.91	.02
Detachment-Parenting2	-.16	.03	-.02	-.05	.83	.00
Detachment-Parenting3	.02	-.04	-.05	.06	.64	.03
Detachment-Parenting4	.25	.02	.00	-.03	.56	.06
Detachment-Parenting5	.29	.09	.01	-.13	.50	-.07
Detachment-Parenting6	.36	.05	.04	-.02	.49	.04
Detachment-Parenting7	.15	.03	.04	-.02	.48	.02
Detachment-Parenting8	.28	.01	-.02	-.05	.45	.01
Exhaustion-Work1	-.01	-.09	.07	.00	.03	.91
Exhaustion-Work2	.06	.03	-.01	-.05	-.01	.81
Exhaustion-Work3	-.02	.07	.01	.01	.05	.79
Exhaustion-Work4	.09	.13	-.05	-.05	-.01	.70
Exhaustion-Work5	.03	.25	-.06	-.03	.01	.60

Note: Boldface type indicates factor loadings greater than .30. Explained variance = 65.36%; extraction method is maximum likelihood; rotation method is oblimin.

TLI = .93, SRMR = .07, RMSEA = 0.04; 95% confidence interval [CI] = [.04, .05]). The second model, in which all 38 items were led to form six first-order factors and one second-order factor (Burnout), also fit the data, but the fit was slightly lower than that of the first model (CFI = .93, TLI = .92, SRMR = .08, RMSEA = 0.05; 95% CI = [.05, .06]). The third model, in which parental burnout and job burnout items were constrained to form three dimensions (Exhaustion, Detachment, Inefficacy, i.e., without a difference between job burnout and parental burnout)

that then formed a second-order factor (Burnout; see Fig. S1 in the Supplemental Material), did not converge; according to the statistical expert we consulted, this might be due to the fact that the indicators did not accurately reflect the latent variables to which they were associated. These results suggest that although job burnout and parental burnout are two related forms of burnout (between-latent-factors $r = .46$)—hence the term *burnout*—they are better seen as two distinct forms of burnout.

Discussion

The results of this study demonstrate the specificity of parental burnout. However, these findings needed to be extended in three ways. First, we needed to replicate these findings in a different sample of parents. Second, we needed to examine whether these different forms of burnout predict (at least partially) different outcomes. Third, we needed to ensure that parental burnout and job burnout are factorially distinct from depressive symptoms and, most importantly, that the *specific* outcomes of each type of burnout cannot be explained by depressive symptoms. We addressed these issues through the three-wave longitudinal study described in Study 2.

Study 2

Factorial distinctiveness and differential outcomes of parental burnout, job burnout, and depressive symptoms

The goal of Study 2 was to assess the distinctiveness of job burnout and parental burnout in relation to depressive symptoms and to examine whether the three constructs are associated with the same or partially different outcomes. We included nine outcomes in the study: parental satisfaction, parental neglect, parental violence, escape and suicidal ideations, problematic alcohol use, disordered sleep, somatic complaints, job satisfaction, and job turnover intention. These outcomes were chosen to reflect important and previously demonstrated consequences of parental burnout, job burnout, and depression. They have never been examined together in a study that measured the three constructs. We expected the constructs to have partially common consequences (e.g., sleep disorders, somatic disorders, addictive behaviors), but we also expected parental burnout and job burnout to have more pronounced consequences in the specific sphere of life from which they originated. Accordingly, parental burnout should have more pronounced consequences on parenting (parental satisfaction, parental neglect, and violence), and job burnout should have more pronounced consequences at work (job satisfaction, turnover intention).

Method

Participants. Participants were recruited via Prolific, a participant-recruitment platform created in the United Kingdom, now used by most top-ranked universities because it enables fast, reliable, and high-quality data collection. Researchers can enter their study proposal

and select screening criteria that ensure that only people with certain characteristics can participate (in the present case, only people whose mother tongue is English, who are a parent, and who hold a job). To avoid self-selection bias, participants were not informed that the study was about parental burnout. The study was presented as a study about “factors of fulfillment and exhaustion in professional and family life.” Participants who met the pre-screening criteria were invited via Prolific to complete the survey online on Qualtrics anonymously (matching across times was done using Prolific ID). As suggested by Prolific, attentional-check questions were randomly inserted in the survey to force participants to pay attention to the study. Participants who failed to select the right answer to the attentional-check questions were dismissed from the analyses. Participants who completed the questionnaire were paid £3 (\$4) for their participation. The same amount was paid at each wave.

At Time 1, a sample of 822 English-speaking parents (59.2% women) completed the whole study without missing any attentional-check question. The women’s ages ranged from 20 to 63 years (mean age = 38.68; $SD = 8.44$), and the men’s ages ranged from 21 to 62 years (mean age = 38.02; $SD = 7.20$). The majority of the sample came from the United Kingdom (55.7%), a minority from other English-speaking countries (31.7%), and the remaining 12.5% from other countries. Overall, the participants had from one to six children. The sample was relatively representative: 38.3% of the participants were educated to secondary level, 43.6% had a first degree from university or college, 15.2% had a master’s degree, and 2.9% had a PhD or MBA degree. At Time 2 (4 months after Time1), 521 parents (57.6% women) completed all questionnaires. At Time 3 (8 months after Time 1), 483 parents (56.2% women) completed all questionnaires. Dropout analysis (i.e., binary logistic regressions) at Times 2 and 3 showed that more women (23.5%) than men (16.7%) dropped from Time 1 to Time 2, $B(1) = .33, p < .05$, and that participants who dropped from Time 1 to Time 2 were slightly younger, $B(1) = .05, p < .001$. Participants who dropped from Time 2 to Time 3 were also slightly younger, $B(1) = .04, p < .001$, and had more children, $B(1) = -.15, p < .05$.

Measures. In addition to sociodemographic questions, the following questionnaires were included at Time 1, Time 2, and Time 3. All the questionnaires were completed with the forced-choice option in Qualtrics, which ensured a data set with no missing data until participants stopped completing the questionnaire. Some participants did not complete the study until the end, which explains the slightly varying sample sizes across analyses. Means and standard deviations are reported in Table S2 in the Supplemental Material.

Parental burnout was assessed with the PBI (see Note 3; Roskam et al., 2017), as in Study 1. Cronbach's α s were .93, .92, and .93 at Times 1, 2, and 3, respectively.

Job burnout was assessed with the MBI-GS (Maslach et al., 2010), as in Study 1. Cronbach's α s were .89, .90, and .90 at Times 1, 2, and 3, respectively.

Depressive symptoms were assessed using the PHQ-8 (Kroenke et al., 2009), a questionnaire widely used in psychiatry to screen for depressive symptoms (for comparative studies with other instruments, see Löwe et al., 2004; Wells, Horton, LeardMann, Jacobson, & Boyko, 2013; Williams, Pignone, Ramirez, & Stellato, 2002). Each item measures one of the nine criteria for depression from the *DSM-5* (American Psychiatric Association, 2013), except for suicidal thoughts. It has been shown that global scores in the PHQ-9 (including an item about suicidal thoughts) and PHQ-8 (excluding this item) have a .97 correlation with each other (Wells et al., 2013) and that including this item does not change the specificity or sensitivity of the instrument (Kroenke et al., 2009). Because we had already asked about suicidal thoughts in another questionnaire (see paragraph on escape and suicidal thoughts below), we preferred to avoid repeating this sensitive question and therefore chose to use the PHQ-8 instead of PHQ-9. Respondents were asked to indicate how often they had experienced each symptom over the past month on a 4-point Likert scale (*not at all, several days, on more than half the days, nearly every day*). The global score was obtained by summing up the items. Cronbach's α s were .90, .90, and .90 at Times 1, 2, and 3, respectively.

Overall parental satisfaction was measured using three items created for the purpose of the current study: "I feel fulfilled as a parent," "My children give meaning to my life," and "I am amazed by my children." Respondents indicated their level of agreement with each item on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). A global score was obtained by averaging the item scores. Cronbach's α s were .86, .86, and .85 at Times 1, 2, and 3, respectively.

Parental neglect was assessed with a selection of items from the Parental Neglect Scale (Mikolajczak, Brianda, et al., 2018). As in Mikolajczak, Gross, and Roskam (2019), this shortened measure was composed of three items: one item targeting physical neglect ("I don't care about my children when I know I should [meals, hygiene, etc.]"), one item targeting educational neglect ("I don't help my children when they really need it [for their homework, to make a decision, to resolve a conflict, etc.]"), and one item targeting emotional neglect ("I don't comfort my children when they are sad, frightened, or distraught"). Items were rated on an 8-point Likert scale (1 = *never or less than once a year*, 2 = *less than once a month*, 3 = *about once a month*, 4 = *a few*

times a month, 5 = *about once a week*, 6 = *a few times a week*, 7 = *about once a day*, 8 = *a few times a day*). A global score was obtained by averaging the item scores. Cronbach's α s were .82, .70, and .83 at Times 1, 2, and 3, respectively.

Parental violence was assessed with a selection of items from the Parental Violence Scale (Mikolajczak, Brianda, et al., 2018). As in Mikolajczak, Gross, and Roskam (2019), this shortened measure was composed of three items: one item targeting verbal violence ("I say things to my children that I then regret [threats, insults, ridiculous nicknames, etc.]"), one item targeting physical violence ("When I get angry, I throw objects at my children or I shake my children"), and one item targeting psychological violence ("I tell my children that I am going to leave, and that they won't see me again if they continue to be difficult"). Items were rated on an 8-point Likert scale identical to that of parental neglect. A global score was obtained by averaging the item scores. Cronbach's α s were .74, .61, and .68 at Times 1, 2, and 3, respectively.

Escape and suicidal ideations were assessed with three items (see Mikolajczak et al., 2019): two items measuring family escape ideations ("I want to leave everything and start a new life" and "I want to go away without leaving any address") and one item measuring suicidal thoughts ("I have suicidal thoughts"). Respondents indicated their level of agreement with each item on an 8-point Likert scale identical to that of parental neglect. A global score was obtained by averaging the item scores. Cronbach's α s were .82, .80, and .85 at Times 1, 2, and 3, respectively.

Problematic alcohol use was measured using the two alcohol-related consequences from the Comprehensive Inventory of Substance and Behavioral Addictions (Deleuze et al., 2015): "During the last three months, has your alcohol consumption brought about negative consequences in your everyday life (e.g., reproaches from or quarrels with the family and/or friends, judicial problems, health problems, negative impact on professional life)?" and "During the last three months, it has been difficult for me to refrain from drinking," both rated on a 4-point Likert scale (1 = *fully disagree*, 2 = *tend to disagree*, 3 = *tend to agree*, 4 = *fully agree*). A global score was obtained by averaging the item scores. Cronbach's α s were below conventionally accepted levels (.52, .51, and .50 at Times 1, 2, and 3, respectively), which indicated that results regarding this variable must be interpreted cautiously.

Disordered sleep was evaluated by a brief questionnaire assessing frequency of sleep difficulties (sleep onset latency > 30 min, nocturnal awakenings > 30 min, waking > 20 min before alarm, nightmares) and subjective sleep quality during the past month on a 4-point

scale (1 = *never*, 2 = *less than once a week*, 3 = *once or twice a week*, 4 = *three times a week or more*). A score for sleep problems was obtained by averaging the item scores. Cronbach's α s were .75, .72, and .78 at Times 1, 2, and 3, respectively.

Somatic complaints were assessed using a selection of the nine most frequent symptoms of the most widely used physical symptoms checklist, the Pennebaker Inventory of Limbic Languidness (Pennebaker, 1982): headache or migraine, back pain, heartburn or abdominal pain, chest pain or racing heart, stiff or sore muscles, running or stuffy nose, sensitive or tender skin, itchy eyes or skin, and cold hands or feet even in hot weather. Items were rated on an 8-point Likert scale identical to that of parental neglect. A global score was obtained by averaging the item scores. Reliabilities were not computed because symptoms were not expected to covary (i.e., a person who has frequent migraine is not necessarily expected to have frequent backache).

Overall job satisfaction was measured using three items from Quinn and Shepard's (1974) job satisfaction index. The items used here were: "All in all, I'm very satisfied with my current job"; "In general, my job measures up to the sort of job I wanted when I took it"; "Knowing what I know now, if I had to decide all over again whether to take my job, I would" (for similar item selection, see also Eisenberger, Cummings, Armeli, & Lynch, 1997). Respondents indicated their level of agreement with each item on a 7-point Likert-type scale (1 = *strongly disagree*, 7 = *strongly agree*). A global score was obtained by averaging the item scores. Cronbach's α s were .91, .92, and .93 at Times 1, 2, and 3, respectively.

Intention to quit the organization (turnover intention) was assessed using three items from Lichtenstein, Alexander, McCarthy, and Wells (2004): "I often think about quitting my company," "I intend to search for a position with another employer within the next year," and "I intend to leave my company in the near future." Respondents indicated their level of agreement with each item on an 8-point Likert scale identical to that of parental neglect. A global score was obtained by averaging the item scores. Cronbach's α s were .95, .95, and .96 at Times 1, 2, and 3, respectively.

Statistical analyses

Factorial distinctiveness. To examine the factorial distinctiveness of parental burnout, job burnout, and depressive symptoms, we started by performing EFA on the baseline sample of parents ($N = 822$). The 22 items of the PBI, the 16 items of the MBI, and the 8 items of the PHQ were entered together in the analysis and subjected to an EFA using maximum likelihood estimation with oblimin rotation. Because the EFA with parental burnout

and job burnout in Study 1 yielded a six-factor solution and because depression is supposed to be a single-factor construct, we set the number of factors to extract to seven. The result of the EFA shown in the Results section corresponds to the pattern matrix of factor loadings. Then, we compared the seven-factor solution that emerged with more parsimonious solutions. Indeed, if job burnout, parental burnout, and depression constructs are not really distinct from each other (or if some of their dimensions are not really distinct from each other), one would expect that solutions with a lower number of factors (in which some job-burnout, parental-burnout, or depression items load on the same factor) would represent a better fit to the data. We therefore compared the seven-factor solution with one-, two-, three-, four-, five-, and six-factor solutions.

We then performed CFA using Stata 15. CFAs were performed on the same sample (the sample size was not large enough to split the sample as in Study 1) and conducted on the basis of the covariance matrix and using robust maximum likelihood estimation with Satorra-Bentler correction for nonnormal data (Satorra & Bentler, 1994). Several goodness-of-fit indices were used to determine the acceptability of the models: RMSEA, SRMR, CFI, and TLI. We tested and compared three models. In the first model, the 22 items of Parental Burnout formed three first-order factors (Exhaustion-Parenting, Detachment-Parenting, Inefficacy-Parenting) loading on a second-order factor (Parental Burnout), the 16 items of job burnout formed three first-order factors (Exhaustion-Work, Detachment-Work, Inefficacy-Work) loading on a second-order factor (Job Burnout), and the 8 items of depression formed one latent factor (Depression); there were covariances between parental burnout, job burnout, and depression. In the second model, the 22 items of Parental Burnout formed three first-order factors (Exhaustion-Parenting, Detachment-Parenting, Inefficacy-Parenting), the 16 items of Job Burnout formed three first-order factors (Exhaustion-Work, Detachment-Work, Inefficacy-Work), and the 8 items of depression formed a first-order factor (Depression); all first-order factors loaded on a single second-order factor (Psychopathology). In the third model, the 22 items of Parental Burnout, the 16 items of Job Burnout, and the 8 items of Depression formed one and the same construct, a single latent variable (Psychopathology).

Distinctiveness of outcomes. We first used path analyses to assess the prospective impact of parental burnout, job burnout, and depressive symptoms on parental satisfaction, parental neglect, parental violence, escape and suicidal ideation, problematic alcohol consumption, disordered sleep, somatic complaints, job satisfaction, and turnover intention. The path analysis was conducted on the 522

participants who completed all measures at both Time 1 and Time 2. It was performed using maximum likelihood estimation⁶ for path coefficients. Paths connected the three constructs (Time 1 parental burnout, Time 1 job burnout, Time 1 depressive symptoms) with the various outcomes (Time 2 parental satisfaction, Time 2 parental neglect, Time 2 parental violence, Time 2 escape and suicidal ideation, Time 2 problematic alcohol consumption, Time 2 disordered sleep, Time 2 somatic complaints, Time 2 job satisfaction, Time 2 turnover intention). Antecedent variables were allowed to correlate with each other, and the residuals of outcome variables were allowed to covary with each other. The model was computed on observed variables, and the overall model fit was therefore perfect. However, the overall fit of the model is of little interest here: The important information is the varying strength of association between different paths (standardized coefficients). We then ran post hoc tests to statistically compare path coefficients in order to stringently test whether the relations between the antecedent measure (parental burnout, job burnout, or depressive symptoms) and the outcomes significantly differed across domains.

We then took advantage of the three waves of Study 2 to investigate intraindividual patterns of change over time (i.e., how within-person change in parental burnout, job burnout, or depressive symptoms are associated with within-person change in the various outcomes). The analysis of change was conducted using a multi-level modeling (MLM) framework with the HLM 7.03 software (for more details about MLM methodology, see Francis, Fletcher, Stuebing, Davidson, & Thompson, 1991; Raudenbush & Bryk, 2002). MLM estimates are based on all the available data at Level 1 but without imputing data. HLM uses maximum likelihood estimation, which does not require the assumption of missingness completely at random. This method was chosen because it allowed us to include parents who did not participate at each measurement point in the study sample.

In the current study, the time component used was the wave (Time 1, Time 2, and Time 3). MLM allows time-varying predictors to be included in the model. As a result, we were able to predict the change in a given outcome from changes in parental burnout, job burnout, or depressive symptoms while controlling for change in other outcomes. Time-varying predictors were added to the Level 1 equation as follows: $OUTCOME_{1it} = \pi_{0i} + \pi_{1i} \times (TIME_{it}) + \pi_{2i} \times (\text{parental_burnout}_{it}) + \pi_{3i} \times (\text{job_burnout}_{it}) + \pi_{4i} \times (\text{depressive symptoms}_{it}) + \pi_{5i} \times (\text{outcome_2}_{it}) + \pi_{6i} \times (\text{outcome_3}_{it}) + \pi_{7i} \times (\text{outcome_n}_{it}) + e_{it}$; $OUTCOME_{1it}$ is observed score at time t for participant i , π_{0i} is the initial status (intercept) for participant i , π_i is the rate of change (slope) for participant i per unit increase in time, and

$TIME_{it}$ is the time component. Variability between individuals was controlled for at Level 2 ($\pi_{1i} = \beta_{10} + r_{1i}$); π_{1i} is the rate of change for participant i , β_{10} is the mean rate of change per unit increase in time (averaged for all participants), and r_{1i} is the distance between participant i and mean slope.

At Level 1, the time-varying predictors were within-person-centered to address bias due to unobserved heterogeneity or unmeasured factors that vary across individuals and have a consistent effect over time on the construct of interest (Raudenbush & Bryk, 2002). Time-varying predictors were also constrained to have fixed effects (Raudenbush & Bryk, 2002). To ensure comparability between the coefficients presented in Table S4 in the Supplemental Material, a data transformation was performed before the main MLM analyses were run. Proportion of maximum scoring was applied and finally multiplied by 100 for interpretability so that all scores had the same range (0–100). Note that the intercept was not a matter of particular interest for the current study.

Coefficients in Table S4 correspond to the magnitude of change in the outcome associated with 1 unit of change in the predictor (i.e., every unit deviation from the person-specific mean) over a wave (i.e., 4 months). For instance, the coefficient associated with the change in parental burnout for the outcome parental satisfaction (i.e., $-.32$) means that every unit increase in parental burnout over a wave (i.e., 4 months) is associated with a decrease of $.32$ units of parental satisfaction.

Results

Factorial distinctiveness.

Exploratory factor analysis. As indicated in the pattern matrix of factor loadings shown in Table 2, the seven-factor solution perfectly distinguishes between the three factors of job burnout, the three factors of parental burnout, and depressive symptoms. There was one cross-loading, but it was within constructs and not between constructs. Moreover, as shown in Table S3 in the Supplemental Material, this seven-factor solution clearly fit the data better in terms of χ^2 and percentage of variance explained than any more parsimonious solution, which suggests that job-burnout, parental-burnout, and depression items do not load on the same factors.

Confirmatory factor analysis. Results showed that the first models, in which parental-burnout, job-burnout, and depression items formed distinct latent factors, both have adequate fit to the data (Model 1: CFI = .92, TLI = .92, SRMR = .07, RMSEA = 0.05; 95% CI = [.05, .06]; Model 2: CFI = .91, TLI = .90, SRMR = .08, RMSEA = 0.05; 95% CI = [.05, .06]). Comparison of fit indices (Akaike information

Table 2. Exploratory Factor Analysis on Parental Burnout Inventory, Maslach Burnout Inventory, and Depression Items (Study 2; $N = 822$)

Items	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
Exhaustion-Parenting1	.78	-.02	-.05	-.07	.07	-.05	.01
Exhaustion-Parenting2	.77	.07	-.13	-.10	.08	.04	.02
Exhaustion-Parenting3	.76	.14	-.14	-.10	.01	.05	.06
Exhaustion-Parenting4	.76	.06	-.11	-.15	.10	.09	.06
Exhaustion-Parenting5	.72	-.02	-.02	.01	.01	-.15	-.05
Exhaustion-Parenting6	.66	.01	.02	.01	.04	-.07	-.04
Exhaustion-Parenting7	.55	-.01	.13	.07	.03	-.09	-.01
Exhaustion-Parenting8	.53	.04	-.03	-.28	-.03	.08	.01
Detachment-Work1	-.02	.93	-.03	-.02	.04	-.01	.04
Detachment-Work2	-.05	.92	.00	-.02	.06	-.01	.03
Detachment-Work3	.03	.61	.00	-.02	.04	-.14	-.10
Detachment-Work4	.09	.59	-.03	-.05	.05	-.03	-.18
Detachment-Work5	.08	.42	.04	.04	-.03	-.15	-.01
Inefficacy-Parenting1	-.11	.03	.80	.03	-.02	.06	.02
Inefficacy-Parenting2	-.07	.02	.78	.00	-.06	.01	.07
Inefficacy-Parenting3	-.16	.01	.78	-.11	-.11	-.02	.05
Inefficacy-Parenting4	-.03	.00	.76	.02	-.02	.01	.09
Inefficacy-Parenting5	.06	-.06	.69	.01	-.04	.02	.00
Inefficacy-Parenting6	.12	.00	.60	.03	-.05	.03	-.03
Detachment-Parenting1	-.10	.02	-.05	-.94	.05	-.03	.02
Detachment-Parenting2	-.14	.01	-.01	-.90	.11	-.03	.01
Detachment-Parenting3	.05	.05	-.01	-.83	-.04	-.03	-.03
Detachment-Parenting4	.12	.00	-.05	-.72	.03	-.01	-.02
Detachment-Parenting5	.12	.03	-.01	-.67	-.02	-.02	-.03
Detachment-Parenting6	.17	.01	-.02	-.64	.00	-.07	-.05
Detachment-Parenting7	.27	-.02	.02	-.53	-.02	-.06	-.09
Detachment-Parenting8	.36	.00	.04	-.44	.12	-.02	-.04
Depression1	.01	.04	-.05	.03	.83	.04	.00
Depression2	.04	.10	.03	.05	.78	.04	-.08
Depression3	.03	.09	-.01	-.10	.75	.02	-.01
Depression4	.02	.04	-.04	-.08	.70	-.02	.02
Depression5	.04	.06	-.01	-.07	.66	.03	-.07
Depression6	-.03	-.10	.05	.01	.65	-.14	.00
Depression7	.13	-.07	.02	.10	.63	-.22	-.03
Depression8	-.05	.02	-.01	-.22	.59	.01	.06
Exhaustion-Work1	.03	.01	-.03	.04	-.01	-.83	.01
Exhaustion-Work2	-.01	.00	.00	-.12	.04	-.78	.03
Exhaustion-Work3	.01	.09	-.04	-.02	.04	-.77	.01
Exhaustion-Work4	.00	.14	-.03	-.03	.05	-.77	.01
Exhaustion-Work5	.04	.08	-.05	.06	.05	-.77	-.05
Inefficacy-Work1	.05	-.04	-.10	-.04	-.05	.02	.82
Inefficacy-Work2	.06	-.12	-.10	-.02	.03	-.02	.75
Inefficacy-Work3	.03	-.12	.07	-.03	-.01	.01	.64
Inefficacy-Work4	-.05	.09	.08	.11	.01	.02	.57
Inefficacy-Work5	-.02	.02	.12	.03	-.02	.05	.56
Inefficacy-Work6	-.03	.07	.14	.02	-.02	-.08	.36

Note: Boldface type indicates factor loadings greater than .30. Explained variance = 67.13%; extraction method is maximum likelihood; rotation method is oblimin.

criterion, Bayesian information criterion) indicated that Model 1 was slightly better than Model 2. By contrast, the third model, in which parental-burnout, job-burnout,

and depression items formed one and the same latent construct, had poor fit to the data ($CFI = .65$, $TLI = .62$, $SRMR = .13$, $RMSEA = 0.10$; 95% $CI = [.10, .11]$).

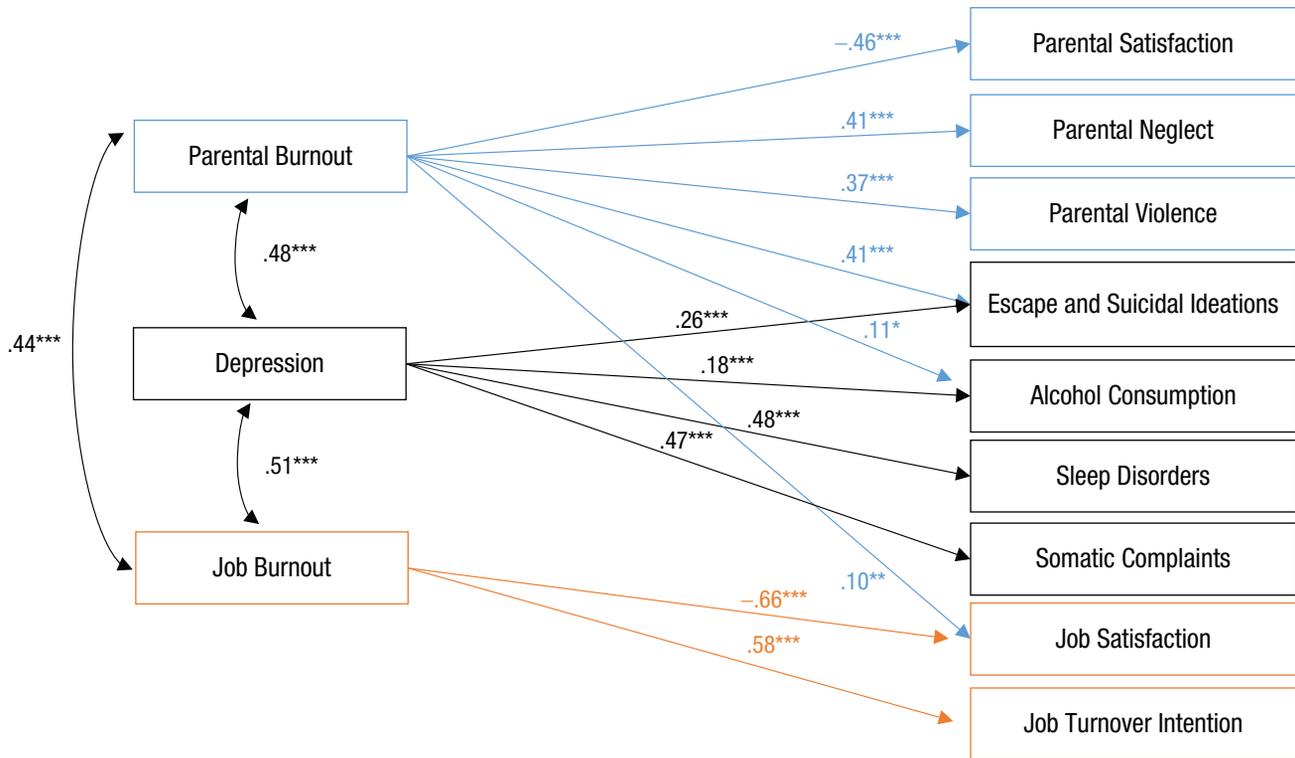


Fig. 2. Outcomes of parental burnout, job burnout, and depression (Study 2; $N = 521$; 37.6% participants dropped from Time 1 to Time 2). Maximum likelihood estimations for path coefficients. Only significant standardized coefficients are reported. Asterisks represent significant paths ($*p < .05$, $***p < .001$).

Distinctiveness of outcomes.

Path analysis. As shown in Figure 2 (showing significant path coefficients only), Figure S2 (showing all coefficients), and Table S5 in the Supplemental Material (post hoc comparisons of path coefficients across measures and outcomes), analyses confirmed that parental burnout had specific outcomes that were predicted by neither job burnout nor depressive symptoms: Parental burnout had a unique effect on parental satisfaction, parental neglect, and parental violence. Analyses also showed that job burnout had specific outcomes that were predicted by neither parental burnout nor depressive symptoms: Job burnout had a unique negative effect on job satisfaction and turnover intention (contrary to job burnout, parental burnout increases job satisfaction). Depressive symptoms had a unique effect on disordered sleep and somatic complaints. Depressive symptoms and parental burnout predicted problematic alcohol use better than job burnout. Finally, parental burnout predicted escape and suicidal ideation better than depressive symptoms, which in turn predicted it better than job burnout.

Analysis of change. Analyses modeling within-person changes across the three waves (for model estimates, see Table S4) showed that changes in parental burnout were

uniquely associated with changes in parental satisfaction, parental neglect (although not in parental violence), and escape and suicidal ideation; changes in job burnout were uniquely associated with changes in job satisfaction and turnover intention; and changes in depressive symptoms were uniquely associated with changes in problematic alcohol use and disordered sleep.

Discussion

The findings of Study 2 dovetail with those of Study 1: They replicate the factorial distinctiveness of parental burnout and job burnout in another language and country and further show that these two forms of burnout are also factorially distinct from depressive symptoms. In addition, and most importantly, findings show that although the three constructs have some common outcomes (e.g., problematic alcohol use, disordered sleep, somatic complaints), parental burnout and job burnout have more pronounced impacts in the specific sphere of life from which they originated: Parental burnout has a unique impact on parenting (parental satisfaction, parental neglect and violence), and job burnout has a unique impact at work (job satisfaction, turnover intention).

General Discussion

These studies support the view that parental burnout and job burnout are distinct forms of burnout that each have specific outcomes that cannot be predicted merely by depressive symptoms. It also seems clear that parental burnout meets the criteria for construct distinctiveness explained in the introduction: Parental burnout items load on interpretable factors distinct from close constructs (Kudielka, von Känel, Gander, & Fischer, 2004), and it has partially distinct outcomes (Campbell et al., 2013). The findings also support the clinical added value of the construct: Parental burnout has a unique and consequential impact for children (neglect, violence). The distinctiveness of parental burnout from job burnout and depressive symptoms has important theoretical and practical implications.

Theoretical implications

At the theoretical level, our results help to shed light on the ongoing debate as to whether burnout is a context-free or context-bound syndrome. The current results strongly support the idea that burnout is context-related and that the context is highly relevant to prediction of the consequences. The fact that burnout is context-related does not mean, however, that parental burnout and job burnout can never co-occur (they probably do in some cases, as suggested by the size of correlation between the two latent factors, i.e., .46 in Study 1 and .44 in Study 2) or that burnout in one sphere cannot prompt the development of burnout in the other sphere. As can be seen in our results, parental burnout actually increases job satisfaction. It is therefore possible that burned-out parents who increasingly invest in their job because it has become their safe haven and source of happiness might ultimately become more vulnerable to job burnout over time, especially if parental burnout is not taken care of.

Another important theoretical implication is that parental burnout cannot be equated with depressive symptoms. As long as depression is viewed and measured as an uncontextualized disorder, then the constructs and measures of parental burnout and job burnout will keep their added value, even if only to predict the consequences. Note that the independence of the constructs does not mean that parental burnout cannot lead to major depression. In a 7-year prospective study, Hakanen and Shaufeli (2012) showed that job burnout facilitated the development of future depression in a minority of participants. The same probably holds true for parental burnout. Depending on the seriousness of the symptoms, the distinctiveness of these two constructions may also vary (e.g., at the beginning,

they may be clearly different, but across time, it might be difficult to distinguish between them, especially if one form of burnout has spilled over to the other domain). Future research is clearly needed to better understand the developmental dynamics of these symptoms.

Practical implications

In addition to their theoretical value, the findings reported here also have substantial practical importance. First, the unique impact of parental burnout for children underscores the need for doctors, therapists, and social workers to be informed about parental burnout. They must be able to identify this condition and make a differential diagnosis between the two forms of burnout and depressive symptoms. Second, our findings justify the continuation of research on parental burnout: As shown in this article, research on depression and job burnout are not sufficient to shed light on the specific consequences of parental burnout. Further research is therefore needed not only on links between parental burnout and neglect and violence but also on other potential consequences at mesosocial (e.g., parent-school collaboration, coparental conflicts) and macrosocial levels (e.g., children's placement, children's health care expenditures).

The outcomes of parental burnout highlight the pressing need to develop interventions to prevent and treat parental burnout. The latter can and must be inspired by research in nearby fields, but our results strongly suggest that interventions that have proven effective in reducing job burnout may not be adopted as they stand to burned-out parents. This is obviously true for interventions that target job-specific antecedents, but it is also true for interventions that target common etiological mechanisms, such as self-compassion or lack thereof. Although burned-out parents too would benefit from learning to accept their weaknesses, limitations, and mistakes as part of shared humanity, they obviously cannot regard acts of neglect or violence toward their children with the same kindness. As this example illustrates, interventions must be developed or adapted considering the specificities of parental burnout.

Limitations and directions for future research

The current findings are robust (large sample sizes replicated in two samples from different cultural contexts), but several limitations bear mention. A first limitation is that Study 2 relied on self-reported outcomes. One

research direction is to extend the present research by using objectively assessed outcome measures. It is difficult for the variables investigated here (because only a fraction of neglectful and violent behaviors is reported to the police), but other consequences are more suitable for objective study. A second limitation is that although the two studies were carried in different countries, they were both conducted in a Western cultural context. Therefore, and although we did not find evidence of variation across Studies 1 and 2, specific consequences of parental burnout could possibly vary across cultures, especially if the latter are very different. Future studies in other cultural contexts and Eastern cultures in particular are therefore needed. A third limitation is the dropout rate (41% of the participants had dropped at Time 3), which is not at random: Women and younger participants were slightly more likely to drop out. However, because there are still 56% mothers in the sample at Time 3 and because the mean age of participants only changed by 1 year (38.41 to 39.39 years old), it is unlikely that the nature of dropout in the current study affected our conclusions.

Transparency

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Author Contributions

M. Mikolajczak and I. Roskam contributed equally to this article. M. Mikolajczak, I. Roskam, F. Stinglhamber, and J. J. Gross developed the study concept and the study design. M. Mikolajczak collected the data. I. Roskam performed the data analysis and interpretation. J. J. Gross outlined the manuscript. M. Mikolajczak and I. Roskam drafted the manuscript. J. J. Gross, F. Stinglhamber, and A. Lindahl Norberg provided critical revisions. All of the authors approved the final version of the manuscript for submission.

Declaration of Conflicting Interests

M. Mikolajczak and I. Roskam have founded a training institute that delivers training on parental burnout to professionals. The institute was founded after the completion of the study (including the analysis of the results) and after the first submission of this manuscript. Thus, the institute did not participate in the funding of this study or influence the process, the results, or their interpretation in any manner. The remaining author(s) declared that there were no conflicts of interest with respect to the authorship or the publication of this article.

Open Practices

All data have been made publicly available via Open Science Framework and can be accessed at <https://osf.io/wvruq>. The complete Open Practices Disclosure for this article can be found at <http://journals.sagepub.com/doi/suppl/10.1177/2167702620917447>. This article has received the badge for Open Data. More information about the

Open Practices badges can be found at <https://www.psychologicalscience.org/publications/badges>.



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Supplemental Material

Additional supporting information can be found at <http://journals.sagepub.com/doi/suppl/10.1177/2167702620917447>

Notes

1. The website is <https://uclouvain.be/fr/instituts-recherche/ipsy/consortium-members.html>.
2. Deductive and inductive approaches lead to very similar results (Roskam, Brianda, & Mikolajczak, 2018). The deductive approach is a theory-driven approach to parental burnout in which symptoms are deduced from the conceptualization of job burnout as composed of exhaustion, detachment, and inefficacy. The inductive approach is an empirically driven approach to parental burnout in which symptoms are induced from the testimonies of burned-out parents without a priori commitments to the nature of these symptoms.
3. Because Items 1 to 8 and 17 to 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.

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