



# Aiming to be perfect parents increases the risk of parental burnout, but emotional competence mitigates it

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## Abstract

Parenting perfectionism, especially the dimension of perfectionistic concerns—preoccupation with self-criticism including concern over mistakes and doubts about own behaviors—, has been shown to be a weighty factor for parental burnout. Drawing on the Balance between Risks and Resources (BR<sup>2</sup>) theory of parental burnout, this paper examines whether emotional competence could moderate/buffer the effect of parenting perfectionism on parental burnout. We investigated this question in two independent samples of parents collected in Belgium ( $N = 347$ ) and Poland ( $N = 377$ ). The results of both studies show that emotional competence cancels out the detrimental effect of perfectionistic concerns on parental burnout. Beyond its contribution to parenting perfectionism and emotional competence literatures, the present article also provides further evidence of the potential of the BR<sup>2</sup> theory of parental burnout.

**Keywords** Parent · Stress · Expectation · Parenting perfectionism · Emotional intelligence

## Introduction

Recent years have seen dramatic changes in parenting (Faircloth, 2014). Parents nowadays set higher and higher expectations for both their parenting behavior and child development, and are increasingly anxious about performing well in parenting (Eibach & Mock, 2011; Lan, 2018; Nelson & Nelson, 2010). Some parents care so much about being good parents that they even aim to be perfect parents. It is probably not a coincidence that it is in this zeitgeist that the terms “parenting perfectionism” (Snell, Overbey, & Brewer, 2005) and “parental burnout” (Lindström, Aman & Norberg, 2011) were coined. Although parenting perfectionism has several positive outcomes (e.g., increased involvement), it increases parental stress and distress, and significantly increases the risk of parental burnout (e.g., Furutani, Kawamoto,

Alimardani, & Nakashima, 2020; Kawamoto, Furutani, & Alimardani, 2018; Sorkkila & Aunola, 2020; Szczygiel, Sekulowicz, Kwiatkowski, Roskam, & Mikolajczak, 2020). The present research aims to examine whether emotional competence can counteract the effect of parenting perfectionism on parental burnout. In order to lay the foundations for our hypotheses, we will introduce the study concepts at hand at the beginning of the article. Because parental burnout is the newer and therefore less known construct, we will start by briefly presenting it. Second, we will then present parenting perfectionism and its relationship with parental burnout. Finally, we will present emotional competence and explain why it might act as a moderator in the above relationship.

## Parental Burnout

Parental burnout (PB) is a psychological syndrome resulting from chronic stress in the parenting domain. It is characterized by overwhelming exhaustion related to one’s parental role, emotional distancing from one’s children, and a loss of parental fulfillment, all of which contrast with how the parent felt before about parenting (Roskam, Brianda, & Mikolajczak, 2018). According to a recent study on its prevalence across 42 countries (Roskam et al., 2021), there are 5% of parents suffering from parental burnout, and the prevalence could be even as high as 8% in Western countries such as Belgium and Poland for instance. This high prevalence is especially

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worrying because PB has been shown to have very detrimental consequences for both parents and children. Not only does it harm the physical and mental health of the parents concerned (Brianda et al., 2020; Mikolajczak, Brianda, Avalosse, & Roskam, 2018), but it also sharply increases neglectful and violent behaviors towards their children (Brianda et al., 2020; Mikolajczak, Gross, & Roskam, 2019). Preventing parental burnout is therefore crucial and this requires to extend the knowledge about its etiological factors and their interactions. The current paper is part of this endeavor.

### Parenting Perfectionism as a Vulnerability Factor for PB

Parenting perfectionism denotes perfectionism in the parenting domain. With the same factor structure as perfectionism (e.g., Hill & Curran, 2016), parenting perfectionism has been defined as a multidimensional construct encompassing two superordinate dimensions: perfectionistic strivings—self-oriented extremely high standards of performance and perfectionistic concerns—preoccupation with self-criticism including for instance concern over mistakes and doubts about own behaviors (see Kawamoto & Furutani, 2018). Parenting perfectionism has been shown to be a strong risk factor for parental burnout and this finding was replicated in both western (Sorkkila & Aunola, 2020) and eastern (Kawamoto et al., 2018) cultural contexts. Yet, the two dimensions of parenting perfectionism—perfectionistic strivings and concerns do not have equivalent effects. While parenting perfectionistic concerns robustly predicted more serious PB, the association of parenting perfectionistic strivings with PB was of smaller magnitude and even turned insignificant when the effect of perfectionistic concerns was controlled (Kawamoto et al., 2018). This result suggests that parenting perfectionistic concerns may be the key dimension of parenting perfectionism that makes parent vulnerable to burnout.

### Emotional Competence as a Buffer

According to the Balance between Risks and Resources (BR<sup>2</sup>) theory of PB, PB is never a product of one risk factor but results from a chronic imbalance between risks and resources in the parenting domain (Mikolajczak & Roskam, 2018). Thus, protective factors could theoretically compensate for the detrimental effect of parenting perfectionism, provided that these factors are equal in weight to the risk factor. Given the robust effect of parenting perfectionism, any protective factor that would be expected to alleviate the risk of parenting perfectionism should be at least equally weighty. One particularly good candidate is “emotional competence.”

Emotional competence (EC; also called emotional intelligence) represents the extent to which individuals can identify,

express, understand, regulate, and use their own and others’ emotions (Mayer & Salovey, 1997). EC has been found to predict resistance to a variety of stressors (e.g., Ciarrochi, Deane, & Anderson, 2002; Karimi, Leggat, Donohue, Farrell, & Couper, 2014; see Petrides et al., 2016), including parenting stressors (see Crandall, Deater-Deckard, & Riley, 2015; Finzi-Dottan, Triwitz, & Golubchik, 2011). These protective effects hold true over and above other personality traits (Mikolajczak, Menil, & Luminet, 2007; Mikolajczak, Petrides, Coumans, & Luminet, 2009; Mikolajczak, Roy, Luminet, Fillée, & de Timary, 2007). Unsurprisingly then, EC has been found to be a potent protective factor for burnout (Karahan & Yalçin, 2009; Mikolajczak, Menil, & Luminet, 2007; Salami & Ajitoni, 2016; Szczygiel & Mikolajczak, 2018) or PB in particular (Mikolajczak, Raes, Avalosse, & Roskam, 2018; Bayot, Roskam, Gallée, & Mikolajczak, 2020 for intrapersonal emotional competence; Szczygiel et al., 2020).

### The Present Study

This study aims to examine whether EC can moderate/counteract the effect of parenting perfectionism (PP) on PB. Based on the above literature, we predicted a positive association between both perfectionistic strivings and concerns and PB (Hypothesis 1), and the positive association of perfectionistic strivings with PB would be insignificant when controlling for the effect of perfectionistic concerns (Hypothesis 2). In addition, we also predicted a negative correlation between EC and PB (Hypothesis 3). Based on the BR<sup>2</sup> theory of PB (Mikolajczak & Roskam, 2018), we predicted an interaction effect between EC and perfectionistic concerns, such that EC would buffer the effects of perfectionistic concerns on PB (Hypothesis 4). At last, we will also explore whether EC will further moderate the effect of perfectionistic strivings on PB when perfectionistic concerns are controlled for; yet, we did not expect EC to moderate any further impact of perfectionistic strivings on PB at this circumstance.

In order to test the generalizability of the findings in the context of the replication crisis in psychological science (see Simmons, Nelson, & Simonsohn, 2011), these hypotheses will be tested in two studies conducted in two different countries (Belgium and Poland). Given that the main effects of PP and EC on PB have already been demonstrated, the focus and novelty of the current study lie in the interaction effect. This study is the very first to test the validity of predictions based on the BR<sup>2</sup> theory. Beyond its contribution to PP and EC literatures, it can, therefore, be seen as a test of the validity of the BR<sup>2</sup> theory of PB. A theory can never be considered as definitely true, but it can be proven false. The absence of any interaction effect between two factors that independently and equally predict PB would invalidate the theory.

## Study 1: Belgian Sample

### Methods

#### Participants and Procedure

The variables used here were extracted from a larger study on Emotional Labor in Parenting. All other variables (i.e., apart from parental perfectionism and EC) were used in an article currently submitted for publication (Lin et al., 2020; available online at <https://doi.org/10.31234/osf.io/ewjyn>). The study program was approved by the Institutional Review Board. The study was posted online on Qualtrics. Participants were eligible to participate only if they were parents and had (at least) one child still living at home. 347 out of 379 respondents answered the whole questionnaire ( $M_{\text{age}}$  of 38.75 years,  $SD_{\text{age}} = 9.77$  years). The demographic characteristics of the sample can also be found in Lin and colleagues (2020). The sample size to be reached was based on the number of parameters included in the path analysis model of Lin and colleagues (2020).

#### Measures

We measured PB with the Parental Burnout Assessment (PBA; Roskam et al., 2018), a 23 item-questionnaire including four dimensions: exhaustion in one's parental role (9 items; e.g., "I feel completely run down by my role as a parent"), emotional distancing from one's child(ren) (3 items; e.g., "I do what I'm supposed to do for my child(ren), but nothing more"), feelings of being fed up with one's parental role (5 items; e.g., "I can't stand my role as father/mother any more"), and contrast with previous parental self (6 items; e.g., "I don't think I'm the good father/mother that I used to be to my child(ren)"). Items are rated on a 7-point frequency scale (from *never* [0] to *everyday* [6]) and summed to form a global score. A detailed psychometric analysis regarding PBA could be seen in Szczygiel and colleagues (2020; Polish sample) and Roskam and colleagues (2018; Belgian sample). The Cronbach's  $\alpha$  of the scale in the current sample was .97.

We assessed intrapersonal EC with the intrapersonal scale of the Profile of Emotional Competence (PEC; Brasseur, Grégoire, Bourdu, & Mikolajczak, 2013), a 50-item questionnaire assessing emotion identification, emotion understanding, emotion utilization, emotion expression, and emotion regulation regarding both the respondent's own (intrapersonal EC; 25 items; e.g., "when I feel good, I can easily tell if it's because I'm happy, proud of myself or relaxed") and others' emotions (interpersonal EC; 25 items; e.g., "I know when a person is angry, sad, or happy even if they don't tell me about it"). Items are rated on a 5-point Likert scale (from *does not describe me at all* [1] to *describes me perfectly* [5]) and averaged to form a global score. Because there were already too many measurements in the study (Lin et al., 2020) from which

the present dataset was drawn, only the intrapersonal dimension of EC was measured here (both dimensions were measured in Study 2). Psychometric analysis for PEC could be consulted in Brasseur and colleagues (2013). The Cronbach's  $\alpha$  of intrapersonal EC in the current sample was .87.

We measured PP with a brief 6-item questionnaire developed for the present study and inspired by both Snell and colleagues (2005) Multidimensional Parenting Perfectionism Questionnaire (MPPQ) and Kawamoto and Furutani's (2018) Japanese version of the Multidimensional Perfectionism Scale (J-MPS). This questionnaire includes two dimensions: perfectionistic concerns (PC; 3 items; e.g., "As a parent, if I failed in part, it's as bad as if I failed completely") and perfectionistic strivings (PS; 3 items; e.g., "As a parent, I expect nothing less than perfection"). The full-scale can be found in Appendix 1. Items are rated on a 5-point scale (*Does not match me at all* [1] to *Matches me perfectly* [5]) and averaged to form scale scores. The Cronbach's  $\alpha$  of PC in the current sample was .82; the Cronbach's  $\alpha$  of PS in the current sample was .87.

#### Analysis Strategy

We tested Hypotheses 1 and 3 via Pearson correlations. We examined Hypothesis 2 and 4 with hierarchical regressions using on SPSS 25. Specifically, in regression analysis, two PP scales were entered simultaneously for predicting PB in the first step; the intrapersonal EC scale was entered in the second step; the two-way multiplicative terms between the intrapersonal EC scale and the two PP scales were then entered in the third step simultaneously. The predictor variables were mean-centered before creating interaction terms to avoid multi-collinearity.

#### Results

The means, standard deviations, and correlations among the study variables are summarized in Table 1 (above the diagonal). As regards the main effects, a clear relation of both PC ( $r(346) = .29, p = .000$ ) and PS ( $r(346) = .19, p = .000$ ) to PB emerged, thereby confirming Hypothesis 1. The relation between PS and PB however disappeared when controlling the effect of PC (see step 1 in Model 1 of Table 2), thereby confirming Hypothesis 2. Finally, there was a clear relation between intrapersonal EC and PB ( $r(346) = -.39, p = .000$ ), confirming Hypothesis 3.

As regards the interaction effects, the interaction term of PC and intrapersonal EC was significant in predicting PB (see step 3 in Model 1 of Table 2). Simple slope tests (see Model 1 of Table 2 and Fig. 1a for interaction plot) were performed and revealed that the positive predictive effects of PC on PB decreased to insignificant as intrapersonal EC increased from low to high. This finding confirmed the buffering effect of intrapersonal EC, thus supporting Hypothesis 4. As predicted,

**Table 1** Descriptive statistics and correlations in both studies

Variables	Study 1 <i>M (SD)</i>	Study 2 <i>M (SD)</i>	1	2	3	4
1 Perfectionistic concerns	2.42 (0.97)	2.64 (0.96)	–	.72**	.29**	–.33**
2 Perfectionistic strivings	2.95 (1.09)	3.14 (0.99)	.64**	–	.19**	–.15**
3 Parental burnout	24.14 (26.37)	27.24 (25.81)	.29**	.20**	–	–.39**
4 Intrapersonal emotional competence	3.46 (0.52)	3.45 (0.53)	–.13*	–.08	–.32**	–
5 Interpersonal emotional competence	Not Applicable	3.52 (0.55)	–.10	.04	–.26**	.63**

Correlations among variables in Study 1 (the Belgian sample) are shown above the diagonal. Correlations in Study 2 (the Polish sample) are shown below the diagonal

\*  $p < .05$ . \*\*  $p < .01$

there was no significant effect of the interaction term of PS and intrapersonal EC. As a whole and adjusted, the multiple regression model (see Model 1 of Table 2) explained 20% of the variance in PB.

## Discussion

The findings of this study were in line with all our hypotheses. Although we used a different measure of PP than that used in Kawamoto and colleagues (2018) study, the effect size of the association between PS ( $r = .19$ ) as well as PC and PB ( $r = .29$ ) in this study was comparable to theirs, suggesting that the relations are between constructs and not only between measures. The correlation between intrapersonal EC and PB observed here ( $r = -.39$ ) was also comparable to previous studies (Bayot et al., 2020; Mikolajczak, Raes, et al., 2018). Most importantly, we demonstrated that intrapersonal EC counter-balanced the effect of PC on PB, as predicted by the BR<sup>2</sup> theory of PB (Mikolajczak & Roskam, 2018).

## Study 2: Polish Sample

We initiated Study 2 in Poland in parallel to Study 1 to test our hypotheses using the full measure of EC and ensure the generalizability of findings. This study followed the same methods as in Study 1.

## Methods

### Participants and Procedure

377 Polish parents ( $M_{\text{age}}$  of 37.83 years,  $SD_{\text{age}} = 7.64$  years) were recruited, all of whom provided data that contained no or very few missing values. 79.8% of families were two-parent, 9.3% were single-parent, and the remaining 10.9% included step-families and multigenerational families. Overall, the

participants had from 1 to 5 children living with them. Their oldest child was aged between 0 and 40 years ( $M_{\text{age}} = 10.68$  years;  $SD_{\text{age}} = 7.10$  years). Among the participants, 5% had over 23 years of formal education, 27% had 19–23 years, 64% had 12–18 years, and 4% had less than 12 years. 87% of them worked for 6–10 h per day, 9% for less than 6 h per day, and 3% for over 10 h per day.

### Measures

We used the same measures as in Study 1, except that we used the whole measure of EC (including both intrapersonal and interpersonal EC). In the current sample, the Cronbach's  $\alpha$ s of intrapersonal and interpersonal EC were .88 and .90 respectively. The Cronbach's  $\alpha$  of PC was .70, that of PS was .81, and that of PB was .96.

### Analysis Strategy

We used the same analysis strategy as in Study 1. In analyses regarding EC, we explored the effect of intrapersonal and interpersonal dimensions in separate regression models.

## Results

The means, standard deviations, and correlations among the study variables are summarized in Table 1 (below the diagonal). As regards the main effects, the results revealed significant positive relations of PS ( $r(376) = .20, p = .000$ ), and PC ( $r(376) = .29, p = .000$ ) to PB, thereby confirming Hypothesis 1. The relation between PS and PB however disappeared when controlling the effect of PC (see step 1 in Model 2 and Model 3 of Table 2), thereby confirming Hypothesis 2. Finally, there was a clear negative relation between intrapersonal EC ( $r(376) = -.32, p = .000$ ), and interpersonal EC ( $r(376) = -.26, p = .000$ ) to PB, confirming Hypothesis 3.

**Table 2** Main and moderating effects of emotional competence and parenting perfectionism on parental burnout

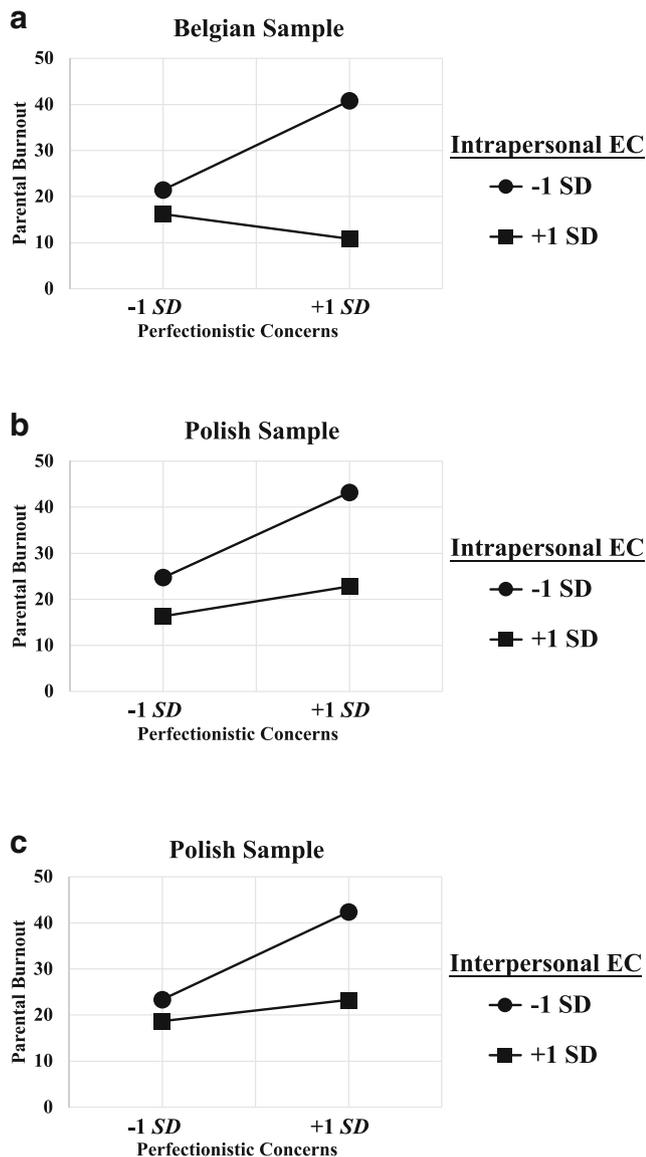
Model 1 <sup>a</sup> :	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI of <i>B</i>	<i>UL</i>
Adjusted $R^2 = .20^{***}$						<i>LL</i>	
Step 1: $\Delta R^2 = .08^{***}$							
PS	-1.19	1.96	-0.05	-0.61	0.544	-5.06	2.67
PC	8.53	1.96	0.32	4.34	0.000	4.66	12.39
Step 2: $\Delta R^2 = .09^{***}$							
PS	0.31	1.88	0.01	0.16	0.870	-3.39	4.01
PC	4.61	1.97	0.18	2.35	0.020	0.74	8.48
Intrapersonal EC	-8.60	1.38	-0.33	-6.24	0.000	-11.31	-5.89
Step 3: $\Delta R^2 = .04^{***}$							
PS	0.04	1.86	0.00	0.02	0.981	-3.61	3.70
PC	3.49	1.96	0.13	1.78	0.075	-0.36	7.34
Intrapersonal EC	-8.81	1.36	-0.33	-6.49	0.000	-11.48	-6.14
PS×Intrapersonal EC	1.30	1.85	0.05	0.70	0.483	-2.34	4.95
PC×Intrapersonal EC	-6.17	1.93	-0.24	-3.19	0.002	-9.97	-2.37
The effects of PC on parental burnout							
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI	<i>UL</i>
1 SD below mean of intrapersonal EC	9.66	2.67	0.37	3.61	.000	4.40	14.91
1 SD above mean of intrapersonal EC	-2.68	2.82	-0.10	-0.95	.343	-8.23	2.87
Model 2 <sup>b</sup> :	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI of <i>B</i>	<i>UL</i>
Adjusted $R^2 = .18^{***}$						<i>LL</i>	
Step 1: $\Delta R^2 = .09^{***}$							
PS	0.56	1.67	0.02	0.34	.735	-2.72	3.84
PC	7.23	1.67	0.28	4.34	.000	3.95	10.51
Step 2: $\Delta R^2 = .08^{***}$							
PS	0.64	1.60	0.03	0.40	.688	-2.50	3.78
PC	6.22	1.60	0.24	3.88	.000	3.07	9.38
Intrapersonal EC	-7.37	1.23	-0.29	-5.99	.000	-9.79	-4.95
Step 3: $\Delta R^2 = .02^{**}$							
PS	0.95	1.58	0.04	0.60	.547	-2.15	4.06
PC	6.24	1.59	0.24	3.93	.000	3.12	9.36
Intrapersonal EC	-7.20	1.22	-0.28	-5.92	.000	-9.59	-4.81
PS×Intrapersonal EC	-0.99	1.55	-0.04	-0.64	.524	-4.04	2.06
PC×Intrapersonal EC	-3.00	1.50	-0.13	-2.00	.047	-5.96	-0.05
The effects of PC on parental burnout							
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI	<i>UL</i>
1 SD below mean of intrapersonal EC	9.24	2.12	.36	4.35	.000	5.06	13.42
1 SD above mean of intrapersonal EC	3.24	2.25	0.12	1.44	.151	-1.18	7.65
Model 3 <sup>c</sup> :	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI of <i>B</i>	<i>UL</i>
Adjusted $R^2 = .17^{***}$						<i>LL</i>	
Step 1: $\Delta R^2 = .09^{***}$							
PS	0.56	1.67	0.02	0.34	.735	-2.72	3.84
PC	7.23	1.67	0.28	4.34	.000	3.95	10.51
Step 2: $\Delta R^2 = .06^{***}$							
PS	1.69	1.63	0.07	1.04	.301	-1.52	4.90
PC	5.88	1.64	0.23	3.59	.000	2.66	9.10
Interpersonal EC	-6.32	1.25	-0.25	-5.04	.000	-8.78	-3.86
Step 3: $\Delta R^2 = .04^{***}$							
PS	2.03	1.61	0.08	1.27	.207	-1.13	5.19
PC	5.90	1.61	0.23	3.66	.000	2.73	9.07
Interpersonal EC	-5.95	1.23	-0.23	-4.82	.000	-8.37	-3.52
PS×Interpersonal EC	-1.10	1.52	-0.05	-0.72	.470	-4.10	1.90
PC×Interpersonal EC	-3.59	1.54	-0.15	-2.33	.020	-6.62	-0.57
The effects of PC on parental burnout							
	<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>	95% CI of <i>B</i>	<i>UL</i>
1 SD below mean of interpersonal EC	9.49	2.15	.37	4.40	.000	5.25	13.73
1 SD above mean of interpersonal EC	2.30	2.30	.09	1.00	.317	-2.22	6.83

The predictor variables were mean-centered before creating interaction terms to avoid multi-collinearity. *CI* confidence interval, *LL* lower limit, *UL* upper limit, *PS* perfectionistic strivings, *PC* perfectionistic concerns, *EC* emotional competence

<sup>a</sup> Model 1 (intrapersonal EC as moderator) was tested in the Belgian sample

<sup>b</sup> Model 2 (intrapersonal EC as moderator) was tested in the Polish Sample

<sup>c</sup> Model 3 (interpersonal EC as moderator) was tested in the Polish Sample



**Fig. 1** Interactional Plots of Emotional Competence Moderating the Effect of Perfectionistic Concerns on Parental Burnout. **a.** Interactions Between Intrapersonal Emotional Competence and Perfectionistic Concerns in the Belgian sample. **b.** Interactions Between Intrapersonal Emotional Competence and Perfectionistic Concerns in the Polish sample. **c.** Interactions Between Interpersonal Emotional Competence and Perfectionistic Concerns in the Polish sample

As regards the interaction effects, the interaction term of PC and intrapersonal EC was significant in predicting PB (see step 3 in Model 2 in Table 2). Simple slope tests revealed that the positive predictive effects of PC on PB decreased to insignificant as intrapersonal EC increasing from low to high (see Model 2 of Table 2 and Fig. 1b for interaction plot). Similar findings also appeared in the analysis with interpersonal EC (see Model 3 of Table 2 and Fig. 1c for interaction plot) as moderator. These findings thus confirmed Hypothesis 4. As predicted, there was no significant effect of the interaction term of PS and intrapersonal or interpersonal EC (see Model

2 and 3 of Table 2). As a whole and adjusted, our multiple regression model with intrapersonal EC as moderator explained 18% of PB, and the model with interpersonal EC as moderator explained 17% of PB.

## Discussion

The results of this study confirmed all our hypotheses, thereby replicating and extending the results of Study 1. The results of both studies taken together are discussed below.

## General Discussion

Aiming to be a perfect parent, PP, is an increasingly common phenomenon in current parenting culture (see Daly, 2007), and both qualitative and quantitative studies have recently called attention to its detrimental effect on parents and, in particular, to its unique effect on parental burnout (Hubert & Aujoulat, 2018; Kawamoto et al., 2018; Sorkkila & Aunola, 2020). In two different cultural contexts (Belgium and Poland), this study found that aiming to be perfect parents puts parents at risk of PB. However, not all perfectionist parents burn out, and this study helps to explain why this is: first, compared to the risk of PS, PC is more dangerous; second, protective factors such as good emotional competencies can buffer the impact of PC on PB. Moreover, these results remain similar even considering demographic variables as control variables (see the detailed discussion in the current article's [Online Supplemental Material](#)). As shown below, these results contribute to the literature on PB, on perfectionism, and on EC.

As far as PB is concerned, our findings provide direct evidence in support of the BR<sup>2</sup> theory (Mikolajczak & Roskam, 2018), which predicts that risk factors can be compensated by equally weighty resources (in the present case) or a collection of smaller resources. As predicted, we found that a weighty resource (here: EC) can indeed counter-balance a weighty risk (here: PP, especially PC). Specifically, this effect holds true in two samples from Eastern and Western Europe, Poland and Belgium respectively, revealing the pervasive potent harm of PC, the commonly powerful benefit of EC, and the ubiquitous explanatory power of the BR<sup>2</sup> theory of PB across Western (at least European) cultures. Future research should replicate this interaction in other parts of the world to ensure that these conclusions also apply to non-Western parents.

Next, our result also contributes to the perfectionism field. Perfectionism was originally defined as a personality trait, and our research may further demonstrate the importance of situating this personality trait in context (see Dunlop, 2015). Literature demonstrated that PS had both adaptive and maladaptive function. Because of the concept overlap, PC may suppress the beneficial effect of perfectionistic strivings to adjustment (R. W. Hill, Huelsman, & Araujo, 2010). For instance, Hill and Curran's

(2016) meta-analysis on the association of perfectionism with burnout revealed that PS significantly predicted *less* burnout symptoms, and these effects were more prominent while controlling the effect of PC. However, this conclusion is less valid for work context, as revealed in Hill and Curran's (2016). It is even invalid for parenting context. Both our research and Kawamoto and colleagues (2018) revealed that PS did not have a significant beneficial effect on PB, even after controlling PC's effect. There may be a number of possible reasons why the beneficial effect of PS is weaker in both work/parenting contexts. One of them may be the ubiquity of intensive norms in both work and modern parenting (see Lin et al., 2020), offsetting the protective effect—increasing intrinsic motivation—of PS (e.g., Chang, Lee, Byeon, Seong, & Lee, 2016). However, future studies are needed to validate this assumption.

Lastly, this study also contributes to the literature on EC in two ways. First, our findings extend our understanding of the buffering effect of EC (see Petrides et al., 2016). Although this effect was well-documented, most previous research tested it by looking at the association between external events, sociodemographic variables, or risky behaviors (e.g., poor diet habits) and psychological or physical health (see Petrides et al., 2016). Our research is the first in this field to demonstrate that EC also buffers the detrimental effect of other personality traits. Second, our findings shed a different light on the status of interpersonal EC as a risk/protective factor vis-à-vis PB. A recent study suggested that while intrapersonal EC is a *protective* factor, interpersonal EC is a *risk* factor for PB (Bayot et al., 2020). The current study suggests, on the contrary, that both intrapersonal and interpersonal EC are protective factors. One reason that may cause this discrepancy lies in the statistical analyses used in these two studies. In particular, Bayot and colleagues (2020) put both intrapersonal and interpersonal EC in the same regression model to predict PB. This has the advantage of controlling for the effect of the other dimension but the disadvantage of potentially masking a portion of its true effect (the “common portion”). For this reason, we in the current research chose to analyze the effect of EC separately. Future studies are needed to shed light on this interesting discrepancy and examine the interaction between EC and parental burnout dimensions.

In addition to the contributions to the literature, this research indeed has a practical implication. Although two evidence-based interventions exist to treat PB (Brianda et al., 2020), there is no program to prevent PB. Designing an effective prevention program requires a thorough understanding of PB's antecedents. As mentioned earlier, PP, among various antecedents, is a decisive risk factor for parental burnout regardless of the cultural contexts. Taking steps at the macrosocial level to reduce parenting perfectionism is therefore crucial (for instance, by reducing peer-pressure on social networks). However, societal changes are often slow. Because our research demonstrated that parents' EC robustly

offsets the detrimental effect of PP, increasing EC should greatly help perfectionist parents. And this can be done relatively quickly. Kotsou, Nelis, Grégoire, and Mikolajczak (2011) has designed a 15-h intervention to improve EC, which has been shown to increase EC level in a sustainable way. Our research result suggests that adapting this intervention program to parents with PP might help to prevent PB. Given the many benefits of improving EC (see Nelis et al., 2011 for review), intervening on EC might prove more cost-effective than intervening on parenting perfectionism alone. However, there definitely requires a study with an experimental research design to examine this proposal.

Despite the foregoing contributions to the literature and the implication, some limitations should be acknowledged. The most obvious one is that both studies relied on a cross-sectional and self-reported design, which prevents the drawing of causal inferences. Future studies would also certainly benefit from using multi-method data collection. The second limitation is that we tested BR<sup>2</sup> theory (Mikolajczak & Roskam, 2018) using only two factors (one risk and one resource), contrary to the original paper (Mikolajczak & Roskam, 2018) in which many risks and resources were considered together. However, this limitation can also be seen as a strength, in that the current design constitutes a simpler test of the theory.

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**Author's Contributions** Moira Mikolajczak (M.M.), Logan Hansotte (L.H.), and Dorota Szczygiel (D.S.) developed the study concept and the study design from which the current data were drawn. L.H. and D.S. collected the data. Gao-Xian Lin (G.-X.L.) suggested using the data to investigate the interactive effect of perfectionism and emotional competence on parental burnout. G.-X.L. performed the data analyses and interpretation. G.-X.L. and M.M. drafted the manuscript. D.S. and Isabelle Roskam (I.R.) provided revisions. All authors approved the final version of the manuscript for submission.

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**Data Availability** Neither of the experiments reported in this article was formally preregistered. However, the database of study variables and the supplementary material have been made available on a permanent third-party archive, Open Science Framework: [https://osf.io/na34j/?view\\_only=8db9312c2bcb426f98a7bab996f02573](https://osf.io/na34j/?view_only=8db9312c2bcb426f98a7bab996f02573).

**Code Availability** Not applicable.

## Declarations

**Protections of Research Participants** The study was carried out in accordance with the provisions of the World Medical Association Declaration of Helsinki.

**Conflicts of Interest/Competing Interests** M.M. and I.R. founded the Training Institute for Parental Burnout (TIPB) which delivers training on PB to professionals. The TIPB did not participate in the funding of this study nor did it influence the process or the results in any manner.

## Appendix 1

**Table 3** The brief parenting perfectionism scale

No.	Item Description (French Version)	Item Description (Polish Version)	Item Description (English Translation)
<b>Perfectionistic Strivings (PS)</b>			
1	En tant que parent, je n'attends de moi rien de moins que la perfection.	Jako rodzic oczekuje od siebie doskonałości.	As a parent, I expect nothing less than perfection.
2	J'ai des standards élevés en tant que parent.	Mam wysokie standardy jako rodzic.	I have high standards as a parent.
3	Je vise à être un parent parfait.	Moim celem jest bycie idealnym rodzicem.	I aim to be a perfect parent.
<b>Perfectionistic Concerns (PC)</b>			
4	En tant que parent, c'est affreux d'échouer devant des autres.	Poczucie, że zawiodłam/tem jako rodzic byłoby dla mnie straszne.	As a parent, it's awful to fail in front of others.
5	En tant que parent, si ce n'est pas parfait, ce n'est pas une réussite.	Wiele od siebie wymagam jako rodzic bo satysfakcjonuje mnie tylko idealne wypełnianie roli rodzicielskiej.	As a parent, if it's not perfect, it's not a success.
6	En tant que parent, si j'ai échoué en partie, c'est aussi grave que d'avoir totalement échoué.	Nawet niewielki błąd przy wychowaniu dzieci odbieram to jako zupełną porażkę.	As a parent, if I failed in part, it's as bad as if I failed completely.

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