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## **The Big Five Personality Traits and Parental Burnout: Protective and Risk Factors**

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*Abstract* : Parental burnout is an emotional disorder related to the context of parenthood (Roskam, Raes, & Mikolajczak, 2017). Personality differences in parental burnout were explored. One thousand seven hundred twenty-three parents, age 20 to 75 years, responded to a questionnaire. Results indicated that three personality traits are linked to this syndrome. A high level of neuroticism, a low level of conscientiousness, and a low level of agreeableness were all found to be risk factors for parental burnout. Parents who have difficulty initiating and maintaining positive affective relations with their child(ren) (high neuroticism), identifying and responding to their child(ren)'s needs (low agreeableness), or providing their child(ren) with a structured and coherent environment (low conscientiousness) are more likely to experience parental burnout syndrome.

*Keywords*: parent, exhaustion, Big Five, GAM

## 1. Introduction

Parenthood can prove to be a difficult and stressful experience (Latson, 1995). These feelings of stress, combined with the accumulation of seemingly challenging situations and certain personality traits, can lead to a state of so-called *parental burnout*. Although it is regularly discussed in popular science publications aimed at parents, parental burnout has only been explored in a handful of published scientific studies, and all of these were conducted among the parents of children with serious and/or chronic diseases (e.g., Lindahl Norberg, 2007; Lindström, Åman, & Lindahl Norberg, 2010). One recent study that did feature an unselected sample (Roskam, Raes, & Mikolajczak, 2017) showed that burnout is not restricted to the parents of sick children.

Parental burnout has three dimensions: emotional and physical exhaustion, emotional distancing from offspring, and reduced parental self-efficacy (Roskam et al., 2017). The pre-burnout (or *burnin*) phase is characterized by excessive presence and investment, high ambitions and heightened demands. These demands lead to mounting difficulties that eventually exhaust the parent, resulting in burnout. It is the most deeply invested and most perfectionist parents who run the greatest risk of developing burnout, as they inevitably come to realize just how unattainable their goals are and just how many obstacles lie in their path (Lindahl Norberg, Mellgren, Winiarski, & Forinder, 2014). Parental burnout is associated with low self-esteem and a high need for control were both risk factors for parental burnout, but only among mothers (Lindström, Åman, & Lindahl Norberg, 2011). The role of such individual features in the burnout process prompted us to investigate the impact of parents' personality traits.

In the present study, we wished to build on these results and look specifically at the influence of the Big Five personality traits (McCrae et al., 1999) in the context of parenthood. The psychology literature has extensively shown that individuals differ in their sensitivity to the risks of emotional disorders, depending on where they lie on these five major personality continua (DeNeve & Cooper, 1998). A high level of neuroticism, for instance, is known to be a risk factor for negative experiences and emotional distress in the form of depression and generalized anxiety disorder

(Watson & Clark, 1984). When Prinzie and colleagues carried out their meta-analysis (2009), their found a robust, albeit moderate, relationship between personality and parenting practices. For example, a high level of neuroticism induced a more intrusive, overprotective and, at times, strict mode of parenting. Based on these findings, we hypothesized that personality plays a role in the emergence of parental burnout.

*Neuroticism* is characterized by frequent worries, as well as greater emotional instability, including more frequent and more intense negative affect (Finch, Baranik, Liu, & West, 2012). Highly neurotic parents react more intensely to life events (Prinzie et al., 2009). This tendency toward negative emotionality increases the proportion of negative affective interactions with their children, and hampers their ability and desire to respond adequately to their children's signals.

*Conscientiousness* manifests itself in self-discipline, order and planning behaviors. Conscientious people report fewer negative affect, especially guilt, and are better able to automatically downregulate negative affect (Javaras et al., 2012). Conscientious parents adhere to childrearing norms that allow them to create a more structured and coherent environment (Prinzie et al., 2009).

*Agreeableness* is characterized by friendly and empathic behaviors. Agreeable individuals are helpful, warm, altruistic, generous and loving (Marsh, Nagengast, & Morin, 2013). Agreeable parents make more positive attributions about their children's behaviors and are better able to identify and respond to their needs (Prinzie et al., 2009).

Extraversion is characterized by dynamism, energy, and sociability. Extraverted individuals appreciate people and large groups, are active and loquacious and have a certain will to dominate. Extraversion is thought to boost parenting, eliciting more active and affirmative behaviors in disciplinary interactions. Parents with a high level of openness, meanwhile, provide greater stimulation for their children (Prinzie et al., 2009).

Accordingly, we set out to test the hypothesis that four of the Big Five, namely neuroticism, conscientiousness, agreeableness and extraversion, are linked to parental burnout. We postulated that, unlike openness, these traits affect emotional experiences linked to others (here, children) and

the way they are regulated. More specifically, we predicted that a high level of neuroticism would prove to be a risk factor for parental burnout, whereas high levels of conscientiousness, agreeableness and extraversion would emerge as protective factors. In addition to testing the impact of each of these personality traits on parental burnout, we also considered their various interactions. Research on interactions between personality traits is a relatively recent development (e.g., Vollrath & Torgersen, 2000), but seems particularly relevant to probing individual differences, for instead of reducing individuals to single personality traits, it takes account of their whole profile.

## **2. General Method**

### **a. Overview**

The study reported here was conducted under the aegis of the BParent research program, which focuses on the nature, causes and consequences of parental burnout. Approved by the ethics committee of the Psychological Sciences Research Institute, this program is conducted at the University of Louvain (UCL) in Belgium. The study described here was part of a much larger data collection project investigating a wide range of factors. Participants in our study were informed about the program through social networks, websites, schools, pediatricians or by word of mouth. In order to avoid (self-)selection bias (we aimed to recruit as broad a sample as possible, including unemployed parents), participants were not informed that the study was about parental burnout. Instead, they were told that it was about “being a parent in the 21<sup>st</sup> century”. Parents could only participate in the study if they had (at least) one child still living at home. Participants were invited to complete an online questionnaire after signing an informed consent form. This form allowed them to withdraw at any stage without having to give any justification. It also assured them that all data would remain anonymous. Participants who completed the questionnaire could take part in a lottery with one chance in 1000 of winning € 200. Those who wished to do so had to supply their email address, but the latter was kept separate from their questionnaire. The sample consisted of 1723 parents (1499 mothers) ranging in age from 20 to 75 years ( $M = 40$  years,  $SD = 8$  years and 3 months).

## **b. Measures**

Parental burnout was probed with the Parental Burnout Inventory (PBI: Roskam, Raes, & Mikolajczak, in press). This scale contains 22 items assessing emotional exhaustion (8 items), emotional distancing (8 items) and parental accomplishment and efficacy (6 items). All items are rated on the same 7-point Likert scale: *never* (0), *a few times a year or less* (1), *once a month or less* (2), *a few times a month* (3), *once a week* (4), *a few times a week* (5), and *every day* (6). Total and factor scores are obtained by summing the appropriate item scores, with higher scores indicating greater burnout (parental accomplishment items are therefore reverse-scored). Cronbach's alphas for the current sample were .93 for emotional exhaustion, .83 for emotional distancing, .79 for personal accomplishment, and .91 for the total score of parental burnout. The PBI's psychometric properties are extensively described in Roskam et al. (2017).

Personality was assessed with the French translation of the Ten-Item Personality Inventory, which measures each of the five personality dimensions via two (opposite) items, rated on a 7-point scale ranging from 1 (*doesn't describe me at all*) to 7 (*describes me very well*). Despite its brevity, this questionnaire has good convergent and predictive validity (Ehrhart et al., 2009; Gosling, Rentfrow, & Swann, 2003).

## **c. Analyses**

The data were analyzed using Generalized Additive Models (GAMs). The advantage of these models is that the spline function allows nonlinear relations and interactions to be considered. It is easier to analyze nonlinear interactions between numerical explanatory variables with GAMs than with polynomial transformations (Wood & Augustin, 2010) in the GLM framework. GAMs provide the flexibility needed to describe what are often nonlinear changes (e.g., age-related) in affective states, and therefore parental burnout. Another advantage of GAMs is that during the estimation process, the various possible models are automatically compared, in order to directly find the one that best fits the data. Parsimony is therefore taken into account, limiting the risk of capitalizing on

chance (McKeown & Sneddon, 2014). The models estimated the influence of personality traits on the total measure of parental burnout <sup>1</sup>. To indicate the nature of the relations, the predictions were calculated and displayed in graphic form. The GAMs were estimated from centered and reduced data, allowing us to estimate effect sizes.

### **3. Results**

#### **a. Main effect of personality on parental burnout**

We began by investigating individual differences in parental burnout according to each personality trait. These initial analyses indicated, contrary to our hypothesis, that three (and not four) of the five personality traits we explored partly explained parental burnout (Fig. 1). As we had predicted, emotionally unstable parents present a greater risk of having a high PBI score ( $edf=1$ , explained deviance=12.5%). Meanwhile, the most conscientious and agreeable parents reported lower levels of parental burnout on the PBI ( $edf=2.27$ , explained deviance=4.4% and  $edf=5.48$ , explained deviance=6.09%) than the least conscientious or least agreeable parents did. Moreover, the GAMs we ran showed that the relationships between conscientiousness or agreeableness and parental burnout were curvilinear, in that not only high but also moderate levels (scores greater than 5 on the scale from 1 to 7, the means at the sample level being 5.57 and 5.12) of these traits constituted a protective factor against parental burnout. By the same token, not being conscientious or agreeable was a risk factor. Extraversion and openness did not influence parental burnout. These initial results supported our predictions. There were no gender differences in any of the results reported above.

INSERT FIGURE 1 ABOUT HERE

#### **b. Interaction effect of personality traits on parental burnout**

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<sup>1</sup> GAMs were estimated using the *mgcv* package in R. The formula we used was: Parental Burnout ~ s(Personality). The splines (“s”) function allowed for a nonlinear fit of the model.



Individuals are characterized by a *profile* where personality traits interact. In order to take this reality into account, we ran a GAM to consider interactions between the three personality traits (neuroticism, conscientiousness and agreeableness) we had found to be linked to our measure of parental burnout (explained deviance = 16.2%). To make the results easier to read, we summarized them for eight personality profiles (e.g., Vollrath & Torgersen, 2000), each featuring a different combination of the three personality traits in one of two modalities (low or high)<sup>2</sup>. The first of these corresponded to parents who were emotionally stable, conscientious and agreeable (nCA). Then came parents who were emotionally stable, conscientious and weakly agreeable (nCa), emotionally stable parents who were weakly conscientious and agreeable (ncA), and parents who were emotionally stable, weakly conscientious and weakly agreeable (nca). We also considered emotionally unstable parents who were conscientious and agreeable (NCA), emotionally unstable parents who were conscientious and weakly agreeable (NCa), parents who were emotionally unstable, weakly conscientious and agreeable (NcA), and parents who were emotionally unstable, weakly conscientious and weakly agreeable (Nca). The predicted PBI scores for each of these eight profiles are set out in Figure 2.

INSERT FIGURE 2 ABOUT HERE

Results (Fig. 2) indicated that parents with the Nca profile had higher PBI scores, while those with the nCA profile were the least prone to parental burnout. Overall, neuroticism seemed to constitute the greatest risk factor for developing parental burnout syndrome, followed by conscientiousness, then agreeableness. To check that it was indeed worthwhile considering these interactions, we calculated a second GAM to probe the main effects. Contrary to our expectations, the proportion of explained deviance (16.4%) for this more parsimonious model was equivalent to that of the interaction model.

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<sup>2</sup> The high and low levels corresponded to one standard deviation above or below the norm. We used an uppercase letter to stand for the personality trait when the parent exhibited a high level of that trait, and a lowercase letter when the parent had a low level of that trait.

#### **4. Discussion**

The present study examined the relationship between parental burnout and personality.

Depending on their personality traits, individuals may not all run the same risk of exhibiting emotional disorders (e.g., higher rates of depression among highly neurotic individuals) and may exhibit different parenting behaviors (stricter parenting exhibited by highly neurotic individuals). Bringing these two notions together, our aim was to highlight the influence of personality on the occurrence of parental burnout.

Results indicated that three personality traits are linked to this syndrome. A high level of neuroticism and low level of conscientiousness and agreeableness were all found to be risk factors for burnout among the parents of unselected children. Neuroticism was the factor that played the greatest role. Previous studies have shown that psychological interventions to improve emotional competencies lead to an improvement in emotion regulation and wellbeing, as well as a long-term reduction in neuroticism (e.g. Nelis et al., 2011). The results of the current study suggest that it would be worth testing the efficiency of emotional competence training on parents experiencing burnout who have high neuroticism. This seems all the more relevant given that previous studies have also shown that emotional competence training reduces occupational burnout symptoms by 50% (Karahan & Yalcin, 2009).

To explore this issue further, we examined the influence of different personality profiles on the occurrence of parental burnout. Results showed, however, that the influence of personality traits on parental burnout can be satisfactorily studied by simultaneously considering their main effects. Neuroticism was found to be of primary importance in determining parental burnout, followed by conscientiousness and agreeableness. The importance of neuroticism is hardly surprising, as many studies have found it to play a key role in affective states (e.g. Finch et al., 2012). Similarly, researchers are increasingly highlighting the influence of conscientiousness on affect (Javaras et al., 2012). It is therefore parents who simultaneously display the highest levels of neuroticism and the lowest levels of conscientiousness and agreeableness who are most likely to develop parental

burnout syndrome. A combination of intrusive and overprotective parenting, incorrect representations of the child(ren)'s intentions, and a chaotic family environment is the greatest risk factor for parental burnout. Conversely, it is parents who are emotionally stable, conscientious and agreeable who are least likely to develop parental burnout. Their desire and ability to identify and respond to their child(ren)'s needs in a structured environment in order to promote the development of their autonomy constitute protective features.

In summary, we demonstrated that we cannot afford to ignore parental personality if we want to understand how parental burnout occurs. Our research allowed us to identify the Big Five personality traits-or more specifically the personality profiles-that make individuals particularly vulnerable to this syndrome. A high level of neuroticism and low levels of conscientiousness and agreeableness are all risk factors. We demonstrated the importance of continuing to explore the influence of personality on parental burnout, and showed that it is enough to consider the main effect of each trait. It would be useful to continue this line of research and confirm our results with a more fine-grained measure of the Big Five and their different facets (the TIPI provides a very brief personality measurement, and therefore constitutes the main limitation of this study), in order to identify specific behaviors that clinicians could work on with parents displaying this syndrome. It would also be interesting to look at how the personality traits of the parents interact with each other.

In addition to looking into the Big Five, future studies will also have to look at other parental characteristics, such as parenting standards. An impressive proportion of the burned-out parents we interviewed as part of an ongoing qualitative study seemed to have very high parenting standards (stemming either from a more generally perfectionist personality or from an unhappy childhood they did not want to reproduce). Another important direction for future research will be to take the temporal perspective into account. As pointed out by an anonymous reviewer, there is a difference between disillusioned (but formerly enthusiastic) parents and parents who were never invested in the role. Longitudinal studies are therefore needed to look more closely into the process of burnout.

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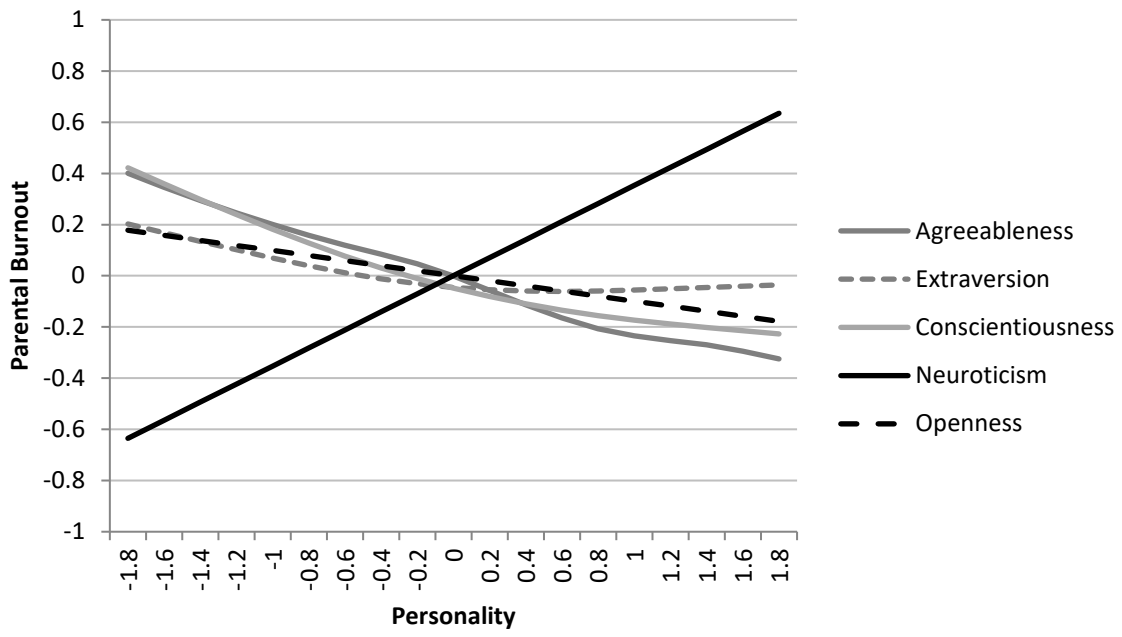
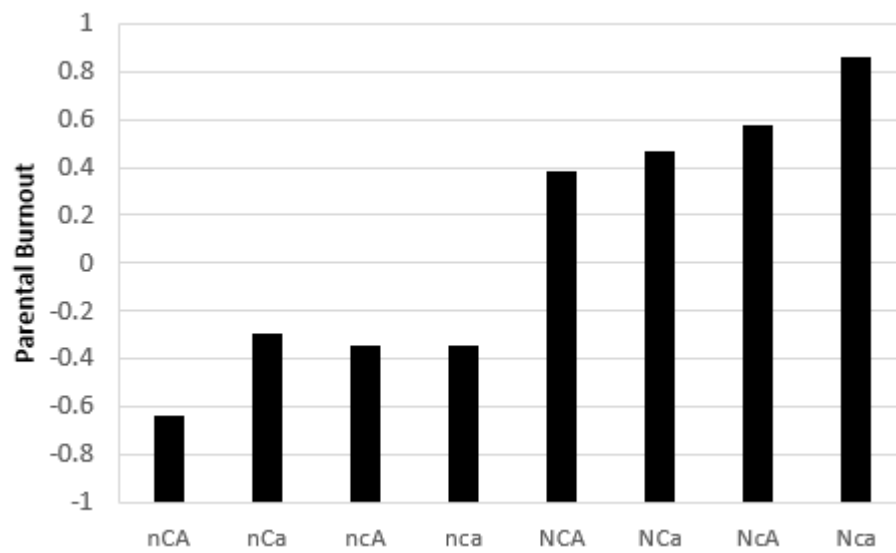


Figure 1: Parental burnout as a function of the Big Five personality traits



*Figure 2: Parental burnout as a function of the interactions between neuroticism, conscientiousness and agreeableness*