

Daily Exhaustion and Support in Parenting: Impact on the Quality of the Parent-
Child Relationship

Journal of Child and Family Studies

<https://doi.org/10.1007/s10826-019-01428-2>

Abstract

Objective: The current study aimed to analyze the effect of parenting-related exhaustion on the quality of the parent-child relationship and to explore the moderating role of partner parental support within this association.

Method: The method was based on longitudinal data collection and a multi-informant design in which 157 mothers and 157 fathers completed questionnaires once a day during one week. Our statistical model used structural equation modeling.

Results: Analyses revealed that parenting-related exhaustion had a negative impact on the quality of the parent-child relationship both for mothers ($\beta = -.17, p < .05$) and fathers ($\beta = -.22, p < .05$). Our results also provide evidence that partner parental support plays a role in compensating for deleterious consequences of parenting-related exhaustion among mothers as long as such exhaustion remains at a low level ($\beta = -.26, p < .05$).

Conclusions: Our results provide support for ongoing research into this topic in relation to both mothers and fathers not only in clinically-referred families but also in ordinary ones, to allow preventive measures to be developed and implemented.

KEYWORDS: Parental Burnout; Dyadic Approach; Couple Satisfaction; Father; Parenting Stress

Parenthood is characterized by the strange paradox that this role is both one of the most fulfilling experiences in adult life and one of the most stressful and energy-consuming (Mikolajczak & Roskam, 2018). Parenting is both an exciting and a challenging role. It provides a sense of accomplishment and personal satisfaction (Nelson, Kushlev, English, Dunn, & Lyubomirsky, 2013) while at the same time requiring adjustment to new experiences (for reviews, see Crnic & Low, 2002; Deater-Deckard, 2008). Parenting can also be experienced as a stressful or exhausting role (Crnic, Gaze, & Hoffman, 2005; Mikolajczak, Raes, Avalosse, & Roskam, 2017). Parenting-related exhaustion appears when stress and pressure related to one's parental role last too long and are not compensated for sufficiently by available resources (Roskam, Raes, & Mikolajczak, 2017). But what happens to the quality of the parent-child relationship when exhaustion increases in mothers or fathers? Does parenting-related exhaustion have negative consequences on the parent-child relationship? Is partner parental support (shown to be an important resource for parenting-related exhaustion) efficient to limit the deleterious consequences of parenting-related exhaustion on the parent-child relationship?

Parenting-related exhaustion is the main dimension of parental burnout syndrome. It is characterized by feelings of being empty and overwhelmed by one's parental role (Roskam et al., 2017). Parents who are suffering from parenting-related exhaustion feel extreme fatigue related to their parental role. They have no energy for looking after their child(ren) and feel that parenting uses up all their resources. They are in survival mode and looking after their child(ren) on autopilot. They feel exhausted when they get up in the morning and have to begin a new day with their child(ren) (Hubert & Aujoulat, 2018; Roskam, Brianda, & Mikolajczak, 2018).

Parenting-related exhaustion results from an imbalance between demands and resources related to the parental role. In other words, parents suffers from parenting-related exhaustion when they are exposed to parenting stress with a lack of compensating resources (Mikolajczak & Roskam, 2018). The factors known to increase parenting stress and diminish resources fall into five categories: sociodemographics, child's individual characteristics, stable traits of the parent, parenting factors and family-functioning factors (Gérain & Zech, 2018; Kawamoto, Furutani, & Alimardani, 2018; Lindström, Åman, & Norberg, 2010; Mikolajczak et al., 2017). For example, perfectionism as a personality trait of the parent, difficult temperament as a child's characteristic or ineffective coparenting as a family-functioning feature are all factors which increase parenting stress and diminish available resources. The reason why parenting-related exhaustion matters is that it can have dramatic consequences on the parent him- or herself (e.g. suicidal thoughts), on the partner and their conjugal relationship (e.g. increased conflicts) and more specifically, on the child and the quality of the parent-child relationship, since

it can result in neglectful and violent behavior on the part of the parent towards the child (Mikolajczak, Brianda, Avalosse, & Roskam, 2018).

The parent-child relationship is characterized by vertical interactions based on asymmetrical and complementary behaviors from each member of the dyad (Sameroff, 1975). As the interactions unfold, parents influence children's development through their knowledge and authority by using various strategies to teach, instruct, support, or advise their children (Boldt, Kochanska, Grekin, & Brock, 2016). It is now well-established that children develop their own self-esteem and their cognitive representations of the social world within the parent-child relationship (Bowlby, 2012; Roskam, Meunier, & Stievenart, 2015; Zhang, 2011). Positive representations of both self and others arise in secure-based parent-child relationships. These are characterized by high levels of parental availability, responsiveness and sensitivity (Zhang, 2011), three features that are negatively impacted by parenting-related exhaustion.

The literature about parenting-related exhaustion is recent and its consequences on the quality of the parent-child relationship have not been fully investigated yet. At present, the study of Mikolajczak et al. (2018) is the only one to report on the impact of parenting-related exhaustion on children. The authors highlighted a significant and positive association between parenting-related exhaustion and neglectful and violent behavior towards children. They also analyzed qualitative data from exhausted parents and found references to neglectful behavior (e.g. leaving a young child unsupervised), verbal violence (e.g. insults) and even physical violence (e.g. slapping) in the exhausted parents' testimonies.

Other studies, mostly conducted with mothers, have tested the correlations between parenting stress and the quality of parent-child relationships. Mackler et al. (2015) showed that parenting stress predicted negative parenting behaviors such as physical punishment and negative parenting attitudes which, in turn, negatively affected the quality of parent-child relationships. Positive associations between parenting stress and child maltreatment were also found (Crouch & Behl, 2001; Nair, Schuler, Black, Kettinger, & Harrington, 2003). Mothers reporting parenting stress were also seen to rate themselves as less competent, less involved in the relationship with their child and having a poorer quality of parent-child interactions compared to mothers without parenting stress (Crnic et al., 2005; Johansson, Svensson, Stenström, & Massoudi, 2017). Possible associations between parenting stress and the quality of parent-child relationships have also been reported in longitudinal research. Crnic et al. (2005) highlighted a significant and negative association between parenting stress in mothers of three-year-old children and maternal positivity and dyadic pleasure in the relationship two

years later. Besemer and Dennison (2018) similarly found that mothers with high parenting stress had poorer relationships with their children a year later compared to mothers with low parenting stress. In sum, parenting stress and exhaustion can be considered as a threat to the welfare of children and the quality of parent-child relationships.

Partner parental support was considered as an important resource to compensate for parenting stress and to prevent parenting-related exhaustion since it helps to maintain or restore the parent's equilibrium between demands and resources in the specific area of parenthood (Parfitt & Ayers, 2014; Séjourné, Vaslot, Beaumé, Goutaudier, & Chabrol, 2012). Partner parental support is defined as the support that partners offer each other in the specific area of parenting. It concerns situations where a parent seeks help from his/her partner when he/she encounters problems or difficulties related to his/her parenting role (e.g. a need to be listened to or a need for help with parenting tasks) (AUTHOR'S PUBLICATION). Partner parental support encompasses three dimensions: an emotional dimension (i.e. listening, validating, exploring or showing empathy toward the feelings and difficulties encountered by the other parent) (Dale, Williams, & Bowyer, 2012), a concrete dimension (i.e. acting concretely when the other parent encounters a problem) (Cohen & Wills, 1985) and a role approval dimension (i.e. validating the other partner in his/her role as parent) (Belsky, Woodworth, & Crnic, 1996).

In a recent study, we found a significant and positive association between partner parental support and parenting-related exhaustion. Higher partner parental support compensated for higher parenting-related exhaustion. Supportive partners were seen to be attentive to the other parent's variations in parenting-related exhaustion and tried to immediately restore his or her balance by providing higher parental support (AUTHOR'S PUBLICATION). As partner parental support and parenting-related exhaustion (i.e. parental burnout) are recent concepts, previous studies rather considered general couple or spousal support in relation to parenting stress. Couple support has been shown to play a protective role with regard to stress and emotional difficulties related to parenting (Parfitt & Ayers, 2014; Séjourné et al., 2012). For example, Sampson, Villarreal, and Padilla (2015) highlighted a negative association between emotional and concrete support and parenting stress in mothers at one year postpartum, and we reported a negative relation between spousal support and distress symptoms in new fathers at three months after childbirth (Gillis, Gabriel, Galdiolo, & Roskam, 2019). It is well established that partner parental support promotes parents' well-being and fulfillment in their role as well as decreasing parenting stress and exhaustion. However, the buffering effect of partner parental support against the negative consequences of parenting-related exhaustion on the quality of parent-child relationships remains unstudied.

We designed the current study to address two issues: (1) to analyze the direct effect of parenting-related exhaustion on the quality of the parent-child relationship in both mothers and fathers and (2) to study the moderating role of partner parental support within the relation between parenting-related exhaustion and the quality of the parent-child relationship in mothers and fathers. Based on the literature review, we expected to find that parenting-related exhaustion had a deleterious effect on the quality of parent-child relationships in mothers and fathers: the more parents were exhausted, the lower the quality of the relationship. In addition, we hypothesized that partner parental support played a protective and moderating role. Higher support from the father would offset the negative consequences of exhaustion on the mother-child relationship quality and higher support from the mother would offset the negative consequences of exhaustion on the father-child relationship quality.

Method

Participants

One hundred fifty-seven heterosexual couples ($N = 314$) consisting of mothers and fathers from a community sample participated in the study. Each couple had at least one child aged between 10 and 36 months. The mothers' mean age was 32.83 years ($SD = 4.10$), ranging from 25 to 43. The fathers' mean age was 35.29 years ($SD = 5.62$), ranging from 26 to 58. The mean number of children per parent was 1.84 ($SD = 0.89$), ranging from 1 to 5. One hundred forty-two parents in the sample were married (48 %). The others ($n = 154$; 52 %) lived with a partner without being married. In terms of educational level, 212 parents (67.3%) had a higher education qualification and 84 (26.7%) had a secondary school diploma. The net monthly income of the couple to which each parent belonged was established: for 7 parents (2.4%) it was between €1 and €1500, for 50 (15.9%) it was between €1500 and €2500, for 121 (38.4%) it was between €2500 and 3500, for 80 (25.4%) it was between €3500 and €4500 and for 38 (12.1%) it was higher than €4500. Two hundred thirteen parents (67.6%) worked full-time, 64 (20.3%) worked part-time and 19 (6.2%) did not work (unemployment, work incapacity, parental leave or stay-at-home parent).

Procedure

The study was approved by the ethics committee of the Psychological Sciences Research Institute at the UCLouvain in Belgium. Couples were recruited with flyers and announcements posted on social networks, in nurseries and at childminders' premises. The parents took part in the study on a voluntary basis. Those who were willing to participate were invited to complete questionnaires online on the Qualtrics platform over seven successive days. First, a sociodemographic data questionnaire was administered during the first weekend.

Second, participants completed parenting-related exhaustion and partner parental support questionnaires every evening from Monday to Friday. At the end, the quality of the parent-child relationship questionnaire was administered during the second weekend. Every day at 5:00 pm, an e-mail was sent to the participants containing the URL of the survey and the following instructions: “Here is the URL of the survey we invite you to complete today. You should complete it before midnight.” The questionnaires were completed online with the forced choice option, ensuring a dataset without missing data. Mothers and fathers completed the same set of questionnaires, but separately.

Participants also signed a written informed consent document describing the longitudinal design of the study. They were assured that the data would remain confidential and that they were free to drop out at any moment without giving any reason. Inclusion criteria were as follows: being at least 21 years old, having a child aged between 10 and 36 months, and living with a partner whether or not that partner was the biological parent of the child(ren). Single parents were excluded because the study focus was on the role of partner parental support. The participants in the study were selected with the following question: “Please select the proposal that corresponds to your family situation: (a) I am in a romantic relationship and we are raising one or more children together (b) I am raising my child(ren) alone or (c) I am in a romantic relationship and we have no children”. Only those who selected answer (a) were included in the study.

Of the 157 mothers asked to participate in the study, 109 (69.4 %) returned the diary questionnaires fully completed from Monday to Friday, 25 (15.9%) fully completed the diary questionnaires four times, 12 (7.6%) fully completed them three times, 7 (4.5%) fully completed them twice, 2 (1.3%) fully completed them only once and 2 (1.3%) did not fully complete them at all. One hundred thirty mothers (89.8%) completed the parent-child relationship questionnaire on the second weekend. Of the 157 fathers asked to participate in the study, 101 (63.9 %) returned the diary questionnaires fully completed from Monday to Friday, 29 (18.4%) fully completed the diary questionnaires four times, 12 (7.6%) fully completed them three times, 10 (6.3%) fully completed them twice, 3 (1.9%) fully completed them only once and 2 (1.9%) did not fully complete them at all. One hundred nineteen fathers (75.3%) completed the parent-child relationship questionnaire on the second weekend. The main reasons for not completing the questionnaires were that the parent did not have time or forgot to do so.

Measures

Parenting-related exhaustion was assessed with four items of the emotional exhaustion subscale of the Parental Burnout Inventory (PBI) (Roskam et al., 2017). The PBI (Copyright © 1981 Christina Maslach & Susan E. Jackson. All rights reserved in all media. Published by Mind Garden, Inc., www.mindgarden.com) is a 22-item questionnaire including three self-report scales: emotional distancing, emotional exhaustion, and personal accomplishment. To prevent the questionnaire from being too long, we selected 4 of the 8 items from the emotional exhaustion subscale most strongly related to the total PBI score and relevant for daily assessment purposes. The respondent indicated the extent to which he/she had experienced each symptom of parenting-related exhaustion (e.g., “Today I felt exhausted having spent the day with my children”) during the day using a 6-point frequency scale as follows: 1 (“not at all”), 2 (“once during the day”), 3 (“twice during the day”), 4 (“three times during the day”), 5 (“four times during the day”) or 6 (“more than four times during the day”). Coefficient alpha in the initial validation study was .95 for the emotional exhaustion subscale (Roskam et al., 2017). Cronbach’s alphas in the current sample were satisfactory, with average values of .87 (range .85-.91) for fathers and .88 (range .80-.95) for mothers. Mean scores were computed to figure out the average level of the parenting-related exhaustion score over a week. The MEAN function in SPSS 23 (IBM, 2015), which returns the arithmetic mean of its arguments that have valid, nonmissing values, was used to work on all available data.

Quality of the parent-child relationship was assessed with a selection of 10 items of the Attachment Q-Sort (AQS) (Waters & Deane, 1985). The original version of the AQS consists of 90 cards describing child attachment behaviors in a wide range of situations. The observer (i.e. a researcher or a parent) must sort the cards in a rectangular forced nine-category distribution varying from least (category 1) to most (category 9) characteristic of the target child. In the current study, we adapted the AQS into a questionnaire with Likert-type scales. The selection of 10 items was made not only to prevent the questionnaire from being too long but also to focus on the quality of the parent-child relationship rather than on attachment security (e.g. “My child gets angry with me easily”, “My child is impatient and demanding with me. He gets ideas in his head and pesters me until I do what he wants”, “When I ask, my child willingly agrees to share or give me an object”). The parent indicated the extent to which the items corresponded to the behaviors of his/her own child while interacting with him/her, using a 5-point frequency scale as follows: 1 (“Never”), 2 (“Not much”), 3 (“Sometimes”), 4 (“Often”) and 5 (“Always”). Coefficient alpha in the initial validation study ranged from .70 to .95 (Waters & Deane, 1985). Cronbach’s alphas in the current study were satisfactory, with values of .77 for fathers and .73 for mothers. A mean score based on the 10 items was computed using the MEAN function in SPSS 23 (IBM, 2015).

Partner parental support was assessed with six items of the Partner Parental Support Questionnaire (PPSQ) (AUTHOR'S PUBLICATION). We used the two versions of the PPSQ: the perceived and the given support versions. The PPSQ is a 15-item questionnaire including three self-report 5-item scales: emotional support ("My partner listens to the concerns I have as a mother/father" or "I listen to the concerns my partner has as a mother/father"), concrete support ("When I am exhausted as a parent, my partner gives me the extra support I need" or "When my partner is exhausted as a parent, I give him the extra support he/she needs"), and role approval ("My partner tells me that I am a good mother/father" or "I tell my partner that she/he is a good mother/father"). On each day during the week, the respondent indicated the extent to which he/she had supported his/her spouse during the day (i.e. given support) (e.g. "Today I showed my partner that I understand the stress that she/he can feel as a mother/father") and the extent to which his/her spouse had supported him/her during the day (i.e. perceived support) (e.g. "Today my partner showed me that he/she understands the stress that I can feel as a mother/father") using a 6-point frequency scale as follows: 1 ("at no time during the day"), 2 ("once during the day"), 3 ("twice during the day"), 4 ("three times during the day"), 5 ("four times during the day") or 6 ("more than four times during the day").

To prevent the questionnaire from being too long, we selected the 6 items most strongly related to the total score for PPSQ perceived and given support versions and relevant for daily assessment (AUTHOR'S PUBLICATION). Coefficient alpha in the initial validation study was .96 for the perceived support version and .95 for the given support version. For the perceived support version, Cronbach's alphas in the current sample were on average .82 (range .74-.90) for fathers and .88 (range .83-.92) for mothers. For the given support version, Cronbach's alphas in the current sample were on average .88 (range .85-.92) for fathers and .90 (range .86-.94) for mothers.

Whereas parenting-related exhaustion and the quality of the parent-child relationship were measured for the two parents separately through self-reports, the rating of partner parental support was based on a cross-rater strategy. In particular, partner parental support for the mothers was computed from the mean of both the parental support that they perceived from their partner (i.e. the fathers) and the parental support that their partner (i.e. the fathers) reported giving to them, $r(155) = .48, p < .01$. For the fathers, partner parental support was computed from the mean of the parental support that they perceived from their partner (i.e. the mothers) and the parental support that their partner (i.e. the mothers) reported giving to them, $r(155) = .46, p < .01$. As a result, the present study partially controlled for shared-method variance between the variables in the moderation analysis.

Data Analyses

Prior to analyzing the effect of parenting-related exhaustion on the quality of the parent-child relationship and the moderating role of partner parental support in this association, we conducted several preliminary analyses with the computer program SPSS 23 (IBM, 2015). First, we performed binary logistic regression analyses to explore the predictors of missingness. Second, we calculated descriptive statistics concerning parenting-related exhaustion, partner parental support and the quality of the parent-child relationship. Third, we calculated Pearson correlation coefficients to analyze the bivariate relations between parenting-related exhaustion, partner parental support and the quality of the parent-child relationship of mothers and fathers.

We conducted the main analyses using a structural equation modeling (SEM) framework with Stata 15 software (StataCorp., 2015). The SEM model considered mothers' and fathers' data to take the couple level into account. It was tested on the basis of observed variables encompassing the direct effects of parenting-related exhaustion and partner parental support on the quality of the parent-child relationship, the moderating effect of partner parental support within the relations between parenting-related exhaustion and the quality of the parent-child relationships, and the covariations between mothers' and fathers' variables. We conducted analyses based on the covariance matrix using the robust maximum likelihood estimation. Several goodness-of-fit indices were used to determine the acceptability of the models: χ^2 , the comparative fit index (CFI) and the root mean square of approximation (SRMR). Chi-square compares the observed variance-covariance matrix with the predicted covariance matrix. Theoretically, it ranges from 0 (perfect fit) to infinity (poor fit). It is considered as satisfactory when it is non-significant (Byrne, 2001). Values close to or greater than .90 are desirable on the CFI (Hu & Bentler, 1999). For SRMR, values close to .08 or smaller are generally considered a good fit. Because the RMSEA is an absolute value of fit, a value of zero indicates perfect fit (Hu & Bentler, 1999).

Results

We entered predictors of missingness (i.e., age, number of children, educational level, incomes, work arrangement, parenting-related exhaustion on Monday, partner parental support on Monday and the quality of the parent-child relationship) in logistic regressions with the dropout binary (i.e. complete vs. incomplete data over the seven-day period) as the dependent variable. For mothers, no factor was a significant predictor of attrition. For fathers, only the level of perceived parental support at Wave 1 was a significant predictor of attrition ($\beta = -0.28, p < .05$). The drop-out fathers perceived less partner parental support than the other

participants. The pattern of missingness cannot be considered as random, but is unlikely to alter the interpretation of the results.

We present the mean, standard deviation, and range for all variables in Table 1.

Table 2 displays the correlation coefficients (and Cohen's *d*) between parenting-related exhaustion, parental support and the quality of the parent-child relationship of mothers and fathers separately. As expected, there was a significant and negative association between parenting-related exhaustion and the quality of the parent-child relationship in mothers and fathers. These moderate correlations suggest that the more exhausted the parent is, the less satisfactory the quality of the parent-child relationship becomes. Moreover, an expected significant and positive association was found between parental support and parenting-related exhaustion in mothers and fathers. The result suggests that the more exhausted the parent is, the more he/she gets partner parental support.

Insert Table 1 & 2 about here

For the main analyses, as shown in Figure 1, we found a significant and direct effect of parenting-related exhaustion on the quality of the parent-child relationship for both mothers and fathers. In other words, parenting-related exhaustion has a negative impact on the quality of the parent-child relationship: the higher the level of exhaustion, the lower the quality of the parent-child relationship for both parents. We also found a significant and direct effect of partner parental support on the quality of the parent-child relationship for mothers with the partner's parental support to the mother seeming to increase the quality of the mother-child relationship.

With regard to the interaction terms, the moderating role of partner parental support in the relation between parenting-related exhaustion and the quality of the parent-child relationship was significant only for mothers, not for fathers. This suggests that the partner's parental support can compensate for the deleterious effect of the mother's parenting-related exhaustion on the quality of the mother-child relationship, but not for the deleterious effect of the father's parenting-related exhaustion on the quality of the father-child relationship. The interaction, which is presented in Figure 2, also shows that this compensating effect is limited to a low level of parenting-related exhaustion. When the mother is very exhausted, her partner's parental support is no longer sufficient and cannot prevent the deleterious effects of parenting-related exhaustion on the quality of the mother-child relationship.

With regard to the fit indices, χ^2 was significant, $\chi^2_{(13)} = 49.40, p < .001$, suggesting that a significant proportion of the variance was unexplained by the model. However, this should not necessarily lead to the model's rejection. Other fit measures demonstrated a very good fit to the data: CFI = 1.00 and SRMR = .03.

Insert Figures 1 and 2 about here

Discussion

Our main purpose in this current research was to address two issues: (1) to analyze the direct effect of parenting-related exhaustion on the quality of the parent-child relationship in both mothers and fathers and (2) to study the moderating role of partner parental support within the relation between parenting-related exhaustion and the quality of the parent-child relationship in mothers and fathers. The results highlight that parenting-related exhaustion has immediate deleterious consequences on the quality of the parent-child relationship for both mothers and fathers. Also, the current study provides evidence that partner parental support plays a role in compensating for these deleterious consequences in mothers, as long as parenting-related exhaustion remains low.

In line with our expectations arising from the literature review, we found a direct and negative effect of parenting-related exhaustion on the quality of the parent-child relationship for both mothers and fathers. Over a week, the average level of parenting-related exhaustion had a significant impact on the quality of the parent-child relationship during the weekend. In particular, when parents are more exhausted, they also perceive their child as more difficult when they interact together. A vicious circle is then likely to arise, in which the exhausted parent negatively evaluates the behaviors of his/her child while interacting with him/her and, in turn, this negative evaluation exacerbates the symptoms of parenting-related exhaustion. It has been suggested in previous studies that when the parent's level of well-being decreases, the quality of the parent-child relationship is directly impacted (Johansson et al., 2017). However, most previous studies have tested the links between parenting stress and the quality of the parent-child relationship in mothers, and very rarely in fathers (Crnic et al., 2005; Mackler et al., 2015). In the current study, we show that when fathers are exhausted, the quality of their relationship with their child(ren) is also directly and negatively impacted. Our results stress the importance of considering exhaustion in the entire family system both in research on parenting and in clinical interventions.

Our current results also highlight that exhaustion does not have to be at a critically high level for having immediate (i.e. in the following days) deleterious consequences on the parent-child relationship. The participants in the current study were mothers and fathers from a community sample and parenting-related exhaustion was

measured over an ordinary week; moreover, as reported in Table 1, the average level of parenting-related exhaustion was low in the current sample. This suggests that even “ordinary” parenting-related exhaustion represents an immediate threat to the quality of the parent-child relationship, thus providing support for ongoing research into parental exhaustion and its consequences, which must be prevented.

In line with our expectation set out at the end of the literature review, we showed the role of partner parental support in preserving the quality of the parent-child relationship at times of parenting-related exhaustion. We found both a direct and a moderating effect of partner parental support on the quality of the mother-child relationship. Over a week, the more mothers received parental support from their partner, the higher the quality of the relationship with her child(ren) was during the next weekend. This was consistent with previous studies, in which parental support from the father was found to be an essential resource (Parfitt & Ayers, 2014; Sampson et al., 2015; Séjourné et al., 2012). In addition, for mothers who were slightly exhausted, partner parental support played a moderating role within the association between parenting-related exhaustion and the quality of the mother-child relationship. For mothers suffering from higher levels of parenting-related exhaustion, however, additional resources seem to be needed. This is also consistent with the current view about the antecedent mechanism of parenting-related exhaustion as the first main dimension of parental burnout. Parental burnout is considered as the result of an imbalance between demands and resources (Mikolajczak & Roskam, 2018). A high level of exhaustion therefore supposes an accumulation of demands that will probably require several corresponding resources. In such cases, the mother’s receipt of parental support from her partner will not be enough on its own.

For fathers, the results show neither a significant direct nor a significant indirect effect of partner parental support on the quality of the father-child relationship. This suggests that fathers need resources other than parental support from their partner (e.g. some other type of partner support or support from outside the family system) to prevent parenting-related exhaustion from having a deleterious effect on the quality of the father-child relationship. Another explanation may be that fathers do not consider parental support from their partner as true support. Parenthood still remains the most gender-typed social role in adulthood, and mothers are mainly in charge of household and childcare labor (Newkirk, Perry-Jenkins, & Sayer, 2017). Fathers may consider parental support from the mother (e.g. changing the diapers or making the meal) as “just normal” in the division of household chores rather than considering it as special support. If fathers do not view their partner's support as a specific resource, then this support cannot help them to restore the balance between demands and

resources. Again, these interesting results call for greater consideration about fathers' beliefs, values and needs related to their parenting role.

To conclude, parenting-related exhaustion as a concept appeared recently in the literature. Our results provide support for ongoing research into this topic in relation to both mothers and fathers, in particular in terms of the consequences of exhaustion on children, not only in clinically-referred families but also in ordinary ones, to allow preventive measures to be developed and implemented. As we saw, partner parental support can be viewed as a resource in that it protects the quality of the parent-child relationship when mothers are slightly exhausted by their parental role. However, partner parental support is not relevant as a resource either for highly exhausted mothers, or for fathers whatever their exhaustion level. For them, the protective quality of this resource is somewhat limited and complementary resources need to be found.

Limitations and Future Research Directions

While interesting in many ways, this study is by no means definitive. Several limitations have to be recognized. First, the sample in the current study was homogenous. The majority of participants were Caucasian, with a high level of education and a high socio-economic status. Also, they were from a community sample. Homogeneity can be considered as a strength in the current study given its sample size, but it limits our ability to generalize the results. It would be interesting to replicate the results with a more heterogeneous sample (e.g. with different levels of education, different levels of socio-economic status and different levels of parenting-related exhaustion).

Second, the intensive procedure (i.e. daily measurement) made it necessary to limit the number of items to be completed at each measurement occasion. The possibility cannot be excluded that the results might have been different if the questionnaires had been administered in their entirety. Moreover, it is also possible that the frequency of assessments triggered some measurement reactivity in behavioral self-reports.

Third, we could have used the repeated measures of parenting-related exhaustion and partner parental support for mothers and fathers during the week to test a model involving an intercept and a slope for each variable. However, given the number of couples who participated in the research, we did not have the necessary statistical power to compute the model. We therefore chose to consider an average score for both exhaustion and support over the week.

Finally, although a longitudinal method was used, the research design did not permit direct inferences of causation. The possibility cannot be excluded that the same pattern would occur if the position of the variables was reversed. Thus, the quality of the parent-child relationship may impact the level of parenting-related exhaustion. For example, poor parent-child relationships may increase the level of parenting-related exhaustion. To test the causal direction between parenting-related exhaustion and the quality of the parent-child relationship, another experimental design would be needed.

Conflict of Interest Statement

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Author Contributions

AG and IR designed the study, AG executed the study, assisted with the data analyses, and wrote the paper. IR collaborated with the data analyses and writing of the study. All authors read and approved the final manuscript.

Informed Consent Statement

All procedures followed were in accordance with the ethical standards of the responsible committee of the Psychological Sciences Research Institute at the UCLouvain in Belgium. Informed consent was obtained from all participants for being included in the study.

Funding

The authors received financial support for the research from the *Fonds Spécial de Recherche* at the UCLouvain in Belgium.

References

- Belsky, J., Woodworth, S., & Crnic, K. (1996). Trouble in the second year: Three questions about family interaction. *Child Development*, 556-578.
- Besemer, K. L., & Dennison, S. M. (2018). Family Imprisonment, Maternal Parenting Stress and Its Impact on Mother-Child Relationship Satisfaction. *Journal of Child and Family Studies*, 1-12.
- Boldt, L. J., Kochanska, G., Grekin, R., & Brock, R. L. (2016). Attachment in middle childhood: predictors, correlates, and implications for adaptation. *Attachment & Human Development*, 18(2), 115-140.
- Bowlby, J. (2012). *A secure base*. London, England: Routledge.

- Byrne, B. (2001). Structural equation modeling with AMOS. Rahwah, J.: Lawrence Erlbaum Associates.
- Chapman, KJ, Davis, R., Toy, D., & Wright, L.(2004). *Academic integrity in the business school environment: I'll get by with a little help from my friends. Journal of Marketing Education, 26(3), 236-249.*
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98(2), 310.*
- Crnic, K., & Low, C. (2002). Everyday stresses and parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Practical issues in parenting* (pp. 243-267). Mahwah, NJ, US: Lawrence Erlbaum Associates Publishers.
- Crnic, K. A., Gaze, C., & Hoffman, C. (2005). Cumulative parenting stress across the preschool period: Relations to maternal parenting and child behaviour at age 5. *Infant and Child Development: An International Journal of Research and Practice, 14(2), 117-132.*
- Crouch, J. L., & Behl, L. E. (2001). Relationships among parental beliefs in corporal punishment, reported stress, and physical child abuse potential. *Child Abuse & Neglect, 25(3), 413-419.*
- Dale, J., Williams, S., & Bowyer, V. (2012). What is the effect of peer support on diabetes outcomes in adults? A systematic review. *Diabetic Medicine, 29(11), 1361-1377.*
- Deater-Deckard, K. (2008). *Parenting stress*: Yale University Press.
- Gérain, P., & Zech, E. (2018). Does informal caregiving lead to parental burnout? Comparing parents having (or not) children with mental and physical issues. *Frontiers in Psychology, 9.*
- Gillis, A., Gabriel, B., Galdiolo, S., & Roskam, I. (2019). Partner support as a protection against distress during the transition to parenthood. *Journal of Family Issues, 0(0), 0192513X19832933.*
doi:10.1177/0192513x19832933
- Hu, L. t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6(1), 1-55.*
- Hubert, S., & Aujoulat, I. (2018). Parental burnout: When exhausted mothers open up. *Frontiers in Psychology, 9, 1021.*
- IBM. (2015). IBM SPSS Statistics for Windows (Version Version 23.0). Armonk, NY: IBM Corp.
- Johansson, M., Svensson, I., Stenström, U., & Massoudi, P. (2017). Depressive symptoms and parental stress in mothers and fathers 25 months after birth. *Journal of Child Health Care, 21(1), 65-73.*

- Kawamoto, T., Furutani, K., & Alimardani, M. (2018). Preliminary validation of Japanese version of the Parental Burnout Inventory and its relationship with perfectionism. *Frontiers in Psychology, 9*.
- Lindström, C., Åman, J., & Norberg, A. L. (2010). Increased prevalence of burnout symptoms in parents of chronically ill children. *Acta Paediatrica, 99*(3), 427-432.
- Mackler, J. S., Kelleher, R. T., Shanahan, L., Calkins, S. D., Keane, S. P., & O'Brien, M. (2015). Parenting stress, parental reactions, and externalizing behavior from ages 4 to 10. *Journal of Marriage and Family, 77*(2), 388-406.
- Mikolajczak, M., Brianda, M. E., Avalosse, H., & Roskam, I. (2018). Consequences of parental burnout: Its specific effect on child neglect and violence. *Child Abuse & Neglect, 80*, 134-145.
- Mikolajczak, M., Raes, M.-E., Avalosse, H., & Roskam, I. (2017). Exhausted Parents: Sociodemographic, Child-Related, Parent-Related, Parenting and Family-Functioning Correlates of Parental Burnout. *Journal of Child and Family Studies, 1*-13.
- Mikolajczak, M., & Roskam, I. (2018). A theoretical and clinical framework for parental burnout: The Balance between Risks and Resources (BR²). *Frontiers in Psychology, 9*, 886.
- Nair, P., Schuler, M. E., Black, M. M., Kettinger, L., & Harrington, D. (2003). Cumulative environmental risk in substance abusing women: early intervention, parenting stress, child abuse potential and child development. *Child Abuse & Neglect, 27*(9), 997-1017.
- Nelson, S. K., Kushlev, K., English, T., Dunn, E. W., & Lyubomirsky, S. (2013). In defense of parenthood: Children are associated with more joy than misery. *Psychological Science, 24*(1), 3-10.
- Newkirk, K., Perry-Jenkins, M., & Sayer, A. G. (2017). Division of household and childcare labor and relationship conflict among low-income new parents. *Sex Roles, 76*(5-6), 319-333.
- Parfitt, Y., & Ayers, S. (2014). Transition to parenthood and mental health in first-time parents. *Infant Mental Health Journal, 35*(3), 263-273. doi:<http://dx.doi.org/10.1002/imhj.21443>
- Roskam, I., Brianda, M.-E., & Mikolajczak, M. (2018). A Step Forward in the Conceptualization and Measurement of Parental Burnout: The Parental Burnout Assessment (PBA). *Frontiers in Psychology* doi:10.3389/fpsyg.2018.00758
- Roskam, I., Meunier, J.-C., & Stievenart, M. (2015). From parents to siblings and peers: The wonderful story of social development. *Sage Open, 5*(4), 2158244015611455.
- Roskam, I., Raes, M.-E., & Mikolajczak, M. (2017). Exhausted parents: development and preliminary validation of the Parental Burnout Inventory. *Frontiers in Psychology, 8*.

Sameroff, A. (1975). Transactional models in early social relations. *Human Development*, 18(1-2), 65-79.

Sampson, M., Villarreal, Y., & Padilla, Y. (2015). Association between support and maternal stress at one year postpartum: Does type matter? *Social Work Research*, 39(1), 49-60.

Séjourné, N., Vaslot, V., Beaumé, M., Goutaudier, N., & Chabrol, H. (2012). The impact of paternity leave and paternal involvement in child care on maternal postpartum depression. *Journal of Reproductive and Infant Psychology*, 30(2), 135-144. doi:<http://dx.doi.org/10.1080/02646838.2012.693155>

StataCorp. (2015). Stata Statistical Software: Release 14. TX: StataCorp LP.: College Station, .

Waters, E., & Deane, K. E. (1985). Defining and assessing individual differences in attachment relationships: Q-methodology and the organization of behavior in infancy and early childhood. *Monographs of the Society for Research in Child Development*, 41-65.

Zhang, X. (2011). Parent–child and teacher–child relationships in Chinese preschoolers: The moderating role of preschool experiences and the mediating role of social competence. *Early Childhood Research Quarterly*, 26(2), 192-204.