

Full Research Report



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#### **Abstract**

Positive parenting prescriptions prevailing in Western countries encourage parents to regulate their emotions and, more specifically, to show more positive emotion to their children and control negative emotions while parenting. The beneficial effect of this practice on child development has been much documented, but its possible costs for parents have been much less researched. The current study borrowed the well-known emotional labor framework from organizational psychology to examine this issue. We sought to answer five questions in particular: (1) Do parents perceive display rules? (i.e., do they feel pressured to up-regulate positive emotions and down-regulate negative emotions while parenting?) (2) Do parents make regulatory efforts to comply with these rules? (3) Is this costly? (4) Is it possible that these regulatory efforts are associated with higher risk of parental burnout? (5) Are there strategies that render this effort less costly? We investigated these questions in a sample of 347 parents. The results revealed that parents perceive emotional display rules, which were associated with more regulatory efforts and then a higher vulnerability to parental burnout. How parents meet display rules also matters, in that regulating emotions superficially (i.e., surface acting) is more detrimental than regulating genuinely (i.e., deep acting). Overall, these results support the translation of the emotional labor framework to the parenting context, which helps us understand how external pressures on parents may increase parental burnout.

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### **Keywords**

Emotion expression, emotion regulation, emotional labor, parent, stress

The goal of this paper is to adapt a theoretical framework borrowed from affective science in organizational psychology, i.e., "emotional labor," to shed light on a pressing yet under-researched question in parenting psychology: what are the down sides of positive parenting for parents (if any)? Positive parenting consists of nurturing, valuing, empowering, and structuring children in a non-violent way. Positive parents are expected to express positive emotions to their children and manage negative emotions (Chen et al., 2019; Le & Impett, 2019; Le et al., 2019). While the benefits of positive parenting for children have been widely documented, its possible costs for parents have been much less researched. Focusing on a core characteristic of positive parenting (i.e., emotional management), this study aimed to understand how costly it is for parents to manage their emotions to comply with positive parenting prescriptions.

The borrowing of the emotional labor framework to investigate this question is grounded in the fact that this framework has elegantly theorized the cost of emotion management at work, and that parenthood has a number of features that make it increasingly comparable to a job: (1) a number of external prescriptions as to how the parental role should be performed: what parents should do (e.g., be "positive" parents who provide their children with an emotionally secure environment, give them five helpings of fruit and vegetables a day, etc.), and what they should not do (e.g., use corporal or disproportionate punishment, put their very young children in front of screens, etc.), (2) expectations in terms of results (the child should be physically healthy, emotionally secure and up to date with schoolwork, behave politely, etc.), and (3) monitoring/control by the state, which checks whether parents are doing their job properly (via child health centers, school medical check-ups, etc.) and reserves the right to punish them and withdraw custody of the child as a last resort. Parents can no longer carry out their role as they see fit or just use "common sense" as they usually did before. Instead, they need to continuously adjust their behavior in accordance with society's prescriptions (Meeussen & Van Laar, 2018).

The critical changes in parenting in recent decades (see Bornstein, 2015; Faircloth, 2014; Hoghughi, 2004; Verhellen, 2000), and the increase in both parental pressure and parental engagement that have ensued, have coincided with the appearance of the notion of "parental burnout." Just as employees facing too much stress can end up in job burnout (see Maslach et al., 2001 for a review), parents under too much parental stress can end up in parental burnout (Mikolajczak et al., 2019; Roskam et al., 2017). And, just as job burnout has severe consequences for the employee, their customers, and the company more generally, parental burnout also has severe consequences for the parent, their children, and the family system more broadly (Mikolajczak et al., 2018, 2019). Preventing and treating parental burnout requires a thorough understanding of the condition and of its determinants at the macro-, meso- and micro-levels and, most importantly, of the interplay between them. The current paper aims to contribute to this work and to shed light on the conditions under which external pressures on parents increase parental burnout.

It is on this basis that we decided to adapt the emotional labor framework to parenting: we aimed to study the costs of parents' efforts to manage their emotions in order to comply with positive parenting prescriptions. This does not amount to reducing parenting to a job—it is obviously so much more than that—but the parallels between work and parenting that we mentioned earlier in the introduction legitimize the temporary adoption of this organizational framework to examine whether it can facilitate the understanding of the effects of certain external pressures on parents. Importantly, this does not change the definition of emotional labor (which remains emotion management "in exchange for wages"; reason for which we have not used the term emotional labor in the title of the current paper), nor does it reduce parental emotion regulation to the two flagship emotional labor strategies (surface and deep acting).

## Emotional pressures on parents

Society's views of children have changed drastically over the centuries, leading to a rapidly growing expansion of the role and duties of parents. In the mid-19<sup>th</sup> century, various Western countries started to perceive children not only as unique and important, but also as fragile beings requiring extra efforts to protect (Hoghughi, 2004). This ideology became dominant after the Second World War, and was further fueled by both the birth of the welfare state and John Bowlby's views regarding the importance of the mother-child relationship (Bretherton, 1992). The concept of "child protection" has thus gradually been replaced by high-quality child-raising, with a supportive and warm family to ensure children's harmonious development and fulfill children's need for love and understanding (Hoghughi, 2004; Verhellen, 2000). This development has drastically affected the parental role, which now takes the form of a set of rules, normative recommendations, and prescriptions: these state that parents must not only take care of children's physical survival by ensuring proper nutrition, sleep, exercise and so on, but also bolster their subjective well-being, including their happiness, self-efficacy, and even purpose in life (Bornstein, 2015).

Emotional aspects of parenting are central to these prescriptions (for a recent study, see Carreras et al., 2019): Parents must create a context of affective and relational safety for their children in order to make sure their children feel secure, loved and encouraged, and are allowed to develop and reach their full potential. Parents are therefore increasingly encouraged (or even required) to regulate their emotions during their parent-child interactions. As summarized in Dix's (1991) review and discussed in Le and Impett's (2016) recent empirical research, on the one hand, parents should refrain from too many negative emotions, like anxiety (which could make their relationship with their child insecure; e.g., Manassis et al., 1994) or anger; on the other hand, parents should also express positive emotions, like warmth, affection, happiness, gratitude, pride, or wonder, to sustain the child's development and emotional security (e.g., Bai et al., 2016). This ideology is explicitly expressed in government policies (e.g., the Council of Europe's policy on positive parenting; Rodrigo, 2010; positive parenting tips provided by the National Center on Birth Defects and Developmental Disabilities (NCBDD), 2020), which urge parents to be warm and supportive and to control their negative emotions,

and is implicitly reinforced by social norms that condemn parents who are deemed to be inattentive, cold, or too strict.

All these parenting strategies are embedded in the ideology of "positive parenting" (e.g., Sanders & Mazzucchelli, 2017). The last few decades have seen the attachment of growing importance to research investigating the beneficial effects of positive parenting on child development (see Chen et al., 2019, for a review). In contrast, there has been relatively little research into the consequences of this set of parenting prescriptions for parents. How costly are these prescriptions for parents themselves? Drawing on the work of Le and Impett (2016) and Karnilowicz et al. (2019) on the cost of emotion regulation for parents, this paper aims to provide a theoretical lens for investigating this question further. As explained earlier, we borrowed the tenets of the *emotional labor* framework (e.g., Grandey et al., 2013) in order to examine whether emotional display rules exist in parenting (whether parents perceive this prescription to down-regulate negative emotions and/or up-regulate positive emotions in the presence of their children), and if so, whether and when these display rules contribute to exhausting parents and increase the risk of parental burnout, as they do in the work context.

## The notion of emotional labor

The concept of emotional labor (EL) was proposed by Hochschild (1983) to designate the process of managing feelings and their expressions to fulfill the emotional requirements of a job (i.e., to meet the emotional display rules or, in Hochschild's terms, the "feeling rules" of the workplace). Emotional display rules incorporate information about "which" and "how" emotions should be managed "where" and "when."

According to Hochschild (1983), EL is said to occur when: (1) employees are in *direct* contact with customers ("voice to voice" or "face to face"), (2) the organization explicitly or implicitly *specifies* which emotions must/can be expressed and how they have to be expressed (e.g., via training, organizational culture, or precepts such as "Put a smile in your voice"), and (3) the organization directly or indirectly *controls* its employees' emotional expressions. Such emotional display rules create a pressure toward emotion management (i.e., stimulate a regulatory effort) whenever employees' inner and required emotions do not match, i.e., whenever employees find themselves in a situation of emotional dissonance.

According to the tenets of the EL framework, employees perform this regulatory effort mainly using two strategies: surface acting and deep acting. The former refers to bringing the outward expression of emotion in line with the display rules (e.g., suppressing anger and/or putting on a fake smile); the latter consists of attempts to deeply modify internal feelings to align felt and required emotions (e.g., reappraising an event and finding a way to feel and express positive emotion sincerely). These original definitions imply that these two strategies of EL are independent of one another (Mikolajczak et al., 2007), but most empirical research has shown that they may positively intercorrelate (e.g., Grandey, 2003) and may be enacted in tandem (Gabriel et al., 2015).

# EL and job burnout

Hochschild (1983, p. 90) borrowed the idea of "alienation" from Karl Marx to propose that emotional display rules put employees at risk of inauthenticity and emotional dissonance, which leads to self-estrangement, distress, and even job burnout if EL is too frequent (see Wharton, 2009). This proposition has been largely supported. A recent meta-analysis showed that emotional display rules predicted the frequency of both surface and deep acting (Kammeyer-Mueller et al., 2013), which further predicted employees' (lower) well-being and even burnout (e.g., exhaustion, one of the core symptoms in burnout; Hülsheger & Schewe, 2011). Incorporating these concepts in the same research, Goldberg and Grandey (2007) simulated an incoming call center and manipulated the different levels of display rules (with or without explicit rules). Their results confirmed the theoretical mechanism of EL, indicating that emotional display rules predict exhaustion through the mediation pathway of EL acting.

However, the two means of EL do not seem to have equivalent consequences. While most studies on EL reveal that surface acting reliably and consistently predicts job burnout (Grandey & Sayre, 2019), the effect of deep acting is not as consistent across studies. Although some studies have shown a damaging effect of deep acting (though still less harmful than surface acting; e.g. Mikolajczak et al., 2007), most studies have found that it was neither positively nor negatively related to burnout (e.g., Brotheridge & Lee, 2002; Hülsheger & Schewe, 2011).

The concept of "regulatory effort" could explain the different consequences of surface and deep acting. Although surface and deep acting are both effortful, the amount of regulatory effort they require differs (e.g., Grandey, 2003), which is congruent with previous findings in the emotion regulation field showing that suppression is less efficient at managing emotions than reappraisal, because of the extra need for sustained regulatory effort over time (e.g., Goldin et al., 2008; Gross, 1998; McRae, 2016; Richards & Gross, 1999, 2000). If individuals depend more on surface acting to meet organizations' display rules, their effort and cognitive resources are more heavily drained in order to monitor their emotional expression continually and express correct emotions. Continuous resource-draining in the end causes strain and burnout (Brotheridge & Grandey, 2002). In contrast, although deep acting also requires cognitive resources to manage emotions, these efforts are needed only at the onset of emotion; it explains a weaker predictive association of deep acting with job burnout. In a nutshell, it can be assumed that surface acting is more maladaptive than deep acting due to its ineffectiveness and repeated nature (see Hülsheger & Schewe, 2011).

In sum, the EL paradigm offers a compelling framework to explain the mechanism by which some desirable outcomes, i.e., more positive and less negative emotions, can be costly (Grandey et al., 2013) and even lead to exhaustion. Initially, this paradigm aimed to understand the new form of labor in the service sector (Hochschild, 1983). It has subsequently generated hundreds of studies about the cost of emotion management in the work setting. A smaller line of research has drawn on Hochschild's work to investigate the cost of emotion management in the family setting (e.g., Schrodt, 2020; Schrodt & O'Mara, 2019; Wharton & Erickson, 1993, 1995). Parents' regulatory efforts in the positive parenting era have not been much investigated (see Le & Impett's, 2016 for a

notable exception) and yet, these regulatory efforts are probably the closest to EL framework in that the culture of "positive parenting" puts an external pressure on parents' emotion regulation.

# Using the EL framework to understand how emotional pressures on parents are associated with parental burnout

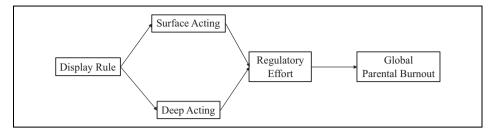
As described earlier, modern parents are now increasingly expected to regulate their emotions to be deemed "good," "positive," and "secure" parents (also see Ryan et al., 2006, p. 212), at least in Western countries (Roskam et al., 2021). As elegantly shown in Le and Impett's (2016) experimental and daily experience studies, parents do attempt to regulate their emotional expressions during caregiving. Making efforts to experience emotions that are incongruent with the genuine emotions (i.e., EL) dampen their perceived authenticity and lowers their parental emotional well-being. This finding, echoing with the premise of EL (Hochschild, 1983), leads us to believe that the EL paradigm may be an excellent lens to study the cost of parents' emotion regulation in the "positive parenting" culture and shed light on the role played by these regulatory efforts in increasing the risk of parental exhaustion and burnout.

Parental burnout is usually described as encompassing four core symptoms: intense exhaustion resulting from one's parental role, perceived saturation with one's parental role, emotional distancing from one's child(ren), and perceived contrast between previous and current parental self (Roskam et al., 2018). These symptoms are theorized to develop because of a chronic imbalance between parenting-related demands and available resources (Mikolajczak & Roskam, 2018). Among multiple factors, cultural factors have recently been shown to weigh heavily, with Western parents being 5 times more vulnerable to parental burnout than parents in the rest of the world (Roskam et al., 2021). Based on this result and knowing that "positive parenting" is currently particularly prevalent in Western countries, it is reasonable to expect that one of the factors depleting parents' resources is their perception of emotional display rules in parenting and the EL strategies they utilize to comply with these rules.

As positive parenting urges parents to both express warmth and other supportive emotions and control negative emotions, the present study used the EL framework to examine five questions: (1) Do parents perceive emotional display rules in parenting? (2) How effortful is it for parents to comply with these emotional display rules? (3) Do parents comply with these emotional display rules by using surface and/or deep acting? (4) Does this emotional management require regulatory efforts? (5) Is it possible that these regulatory efforts are associated with a higher risk of parental burnout? Following previous research in organization literature regarding EL, we proposed that perceived emotional display rules will be associated with more frequent surface acting and deep acting, which will be then associated with more regulatory efforts and then a higher vulnerability to parental burnout (see Figure 1). A number of hypotheses were therefore tested in this study:

Hypothesis 1: Parents will perceive emotional display rules in parenting.

**Hypothesis 1a:** Parents will perceive that they are required to show positive emotions in parenting.



**Figure 1.** Hypothesized model of associations between emotional display rule, surface/deep acting, regulatory effort, and parental burnout.

**Hypothesis 1b:** Parents will perceive that they are required to control negative emotions in parenting.

**Hypothesis 2:** It will require effort from parents to comply with emotional display rules.

**Hypothesis 2a:** It will require effort from parents to show positive emotions in parenting.

**Hypothesis 2b:** It will require effort from parents to control negative emotions in parenting.

**Hypothesis 3:** Parents will comply with emotional display rules by using surface and deep acting.

**Hypothesis 3a:** Perceived display rules will positively correlate with surface acting.

Hypothesis 3b: Perceived display rules will positively correlate with deep acting.

**Hypothesis 3c:** Surface acting will positively correlate with deep acting.

**Hypothesis 4:** Emotion management to meet the emotional display rules will be effortful.

**Hypothesis 4a:** Surface acting will be positively associated with regulatory effort.

**Hypothesis 4b:** Deep acting will be positively associated with regulatory effort.

**Hypothesis 4c:** The association of deep acting with regulatory effort will be lower than the association of surface acting with regulatory effort.

**Hypothesis 5:** Regulatory effort involved in complying with emotional display rules will be related to higher vulnerability to parental burnout.

**Hypothesis 5a:** Regulatory effort will be positively associated with parental burnout.

**Hypothesis 5b:** Both surface acting and deep acting will be positively associated with parental burnout via regulatory effort.

**Hypothesis 5c:** Emotional display rules will be positively associated with parental burnout via the indirect path from surface/deep acting to regulatory effort.

**Hypothesis 5d:** The indirect effect of deep acting on parental burnout via regulatory effort will be smaller than the indirect effect of surface acting on parental burnout via regulatory effort.

## Method

## Participants and procedure

The research program was approved by the Institutional Review Board at the university. The data collection had started and ended in 2019. The study was posted online on Qualtrics. Parents were informed about the survey through social networks, websites, schools, pediatricians, or word of mouth. They were eligible to participate only if they had (at least) one child still living at home. Of the 379 people who responded to the survey, 32 provided incomplete data. As an independent-samples t-test revealed no significant mean difference of the main variables used in the analysis between these missing participants and the other participants, missing participants were all listwise deleted. The final sample consisted of 347 parents ( $M_{\rm age} = 38.75$  years,  $SD_{\rm age} =$ 9.77 years; 30 fathers and 317 mothers). The majority came from France (48.4%) and Belgium (42.9%), a minority from Luxemburg (6.3%) and other European countries (1.5%), and the rest from non-European countries (0.9%). 53.9% worked full-time, 10.7\% worked half-time, 18.2\% worked part-time, and 17.2\% did not work for various reasons (e.g., homemaker). 50.7% were married, 38.0% were legally cohabiting, and 11.2% were single parents. Overall, the participants had from 1 to 7 children. Their oldest children ranged in age from 0 to 42 years ( $M_{\text{age}} = 10.58 \text{ years}$ ;  $SD_{\text{age}} = 9.75 \text{ years}$ ), 20.5% were over 18 years-old, and 50.7% were boys. However, the eldest child is not always the one who is still living at home. Among the participants, 0.6% were educated to primary level, 13.5% were educated to secondary level, 76.4% had a bachelor's or a master's degree, and 9.5% had a Ph.D. or an MBA degree. Income was distributed as follows: 24.2% had a net monthly household income lower than €2500, 39.5% between €2500 and €4000, 17.6% between €4000 and €5500, and 18.8% higher than €5500.

## Measures

Sociodemographic factors. Participants answered questions regarding their age, gender, marital status, net monthly household income, level of education, work regime, number of children, and the gender and age of each child.

Parental burnout. Participants completed the Parental Burnout Assessment (PBA) (Roskam et al., 2018), which is currently the gold-standard measure of parental burnout. It includes 23 items rated on a 7-point frequency scale (from *never* (0), *a few times a year or less* (1), *once a month or less* (2), *a few times a month* (3), *once a week* (4), *a few times a week* (5), *every day* (6)). The PBA is organized into four subscales: 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)). These four subscales are summed to form a global score. The Cronbach's αs in the current sample were .97 for the global scale and .80–.97 for the four subscales.

Perceived emotional display rules in parenting. A questionnaire to measure emotional display rules was created for the purpose of the present study based on a pilot survey run on another sample of parents (N = 166). This pilot survey included both open-ended and close-ended question sections. First, open-ended questions asked about which emotions parents think they need to show and which emotions they think they needed to control in front of their children. Most parents in the pilot study reported what they needed to show in front of their children were positive emotions (80% of the parents) and that what they needed to control were negative emotions (78% of the parents). This made it eligible to restrict the formal questionnaire to the assessment of "showing positive emotions" and "controlling negative emotions." Second, we provided various positive emotions and negative emotions in close-ended questions asking parents which positive emotions they need to show and which negative emotions they needed to control in front of their children. The most-nominated emotions were then extracted to constitute the scale items. This formal questionnaire, Perceived Emotional Display Rules in Parenting Scale, assessed emotional display rules concerning both showing positive emotions (9 emotion items including "love," "joy," "happy," "serene," "proud," "compassionate," "attentive," "enthusiastic," and "satisfied"; e.g., "A parent must be loving towards their child") and controlling negative emotions (10 emotions items including "stress," "irritation," "anxiety," "sadness," "anger," "fear," "hopelessness," "distress," "discouragement," and "rage"; e.g., "A parent must control their stress in the presence of their child"). Items were rated on a 5-point Likert scale (strongly disagree (0), disagree (1), neither agree nor disagree (2), agree (3), strongly agree (4)). The global score was obtained by summing up all items. The Cronbach's  $\alpha$  of the global score in the current sample was .90 (.85 for positive emotions and .89 for negative emotions).

Regulatory effort required to comply with perceived display rules in parenting. The items from the Perceived Emotional Display Rules in Parenting Scale were reframed to assess the perceived amount of effort it took to regulate these emotions to align with the emotional display rules. This questionnaire measured the regulatory effort of both *showing positive* emotions (9 emotion items; e.g., How much effort does it require from me to show my love toward my child?) and *controlling negative* emotions (10 emotion items; e.g., How much effort does it require from me to control my stress in the presence of my child?) on a 6-point Likert scale (not applicable (0), no effort at all (1), little effort (2), average effort (3), lots of effort (4), huge effort (5)). A global score was obtained by summing up all items. The Cronbach's  $\alpha$  in the current sample was .92 for the global scale (.86 for positive emotions and .90 for negative emotions).

Emotional labor. Parents' surface and deep acting were measured using an adaptation of the Emotional Labor Scale (Brotheridge & Grandey, 2002; Brotheridge & Lee, 1998) to parenting. This questionnaire included 6 items rated on a 5-point frequency scale (never (1), rarely (2), sometimes (3), often (4), always (5)), organized into two subscales: surface acting (SA; 3 items, e.g., "In the presence of my child, I try not to express my true feelings"), referring to hiding and faking expressions of emotion, and deep acting (DA; 3 items, e.g., "In the presence of my child, I try to really feel the emotions I think it is necessary to express as a parent"), referring to modifying feelings

to comply with display rules in parenthood. The Cronbach's  $\alpha$ s in the current sample were .73 for SA and .93 for DA.

## Analytic strategy

First of all, hypothesis 1 was tested with one-sample t-tests conducted with IBM SPSS 25.0. Specifically, we compared the mean of the average score (the sum of all items divided by the number of items) of perceived emotional display rule with the scale value that represented no perceived emotional display rule (scale value = 0 [strongly disagree] and scale value 2 [neither agree nor disagree]). In a similar vein, for testing hypothesis 2, we also compared the mean of the average score of regulatory effort with the scale value = 1 (no effort at all).

Next, hypotheses 3-5 were examined via correlations and via path analysis conducted with STATA 16.0. The path analysis model was run with maximum likelihood estimation. Although this estimation is relatively robust to deviations from multivariate normality, standard errors and model-fitting indices could still be biased. Therefore, the Satorra-Bentler correction was used to adjust all the goodness-of-fit statistics involving the likelihood-ratio test comparing the fitted model with the saturated model. For the sake of simplicity, we only present the model that represents parental burnout with its global score. A model where parental burnout is represented by its four subscales is presented in the Online Supplemental Material (see Table S1 and Figure S1); this model yields similar results to those of the model using the global parental burnout score). Evaluation of the fit of the models was carried out on the basis of inferential goodness-of-fit statistics ( $\gamma^2$ ; Hu & Bentler, 1998) and four other indices: the comparative fit index (CFI), the Tucker-Lewis Index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Values close to or greater than .95 are desirable on the CFI and TLI (Hu & Bentler, 1999), while both the RMSEA and SRMR should preferably be lower than .08 (Browne & Cudeck, 1992; Hu & Bentler, 1999).

We evaluated the size of the sample according to the ratio of cases (N) to the number of path analysis model parameters that require statistical estimates (q), which should be over 20:1 (Kline, 2011). Given that we would have 11 parameters in our path analysis, we needed a sample size of at least 220 participants. Recruitment efforts were thus maintained until we reached that sample size. In the end, our efforts led to even larger sample size than needed (N: q = 347:11). De-identified data are publicly available via the Open Science Framework and can be accessed at https://osf.io/sauqh/?view\_only=43 86ebd4ed9d41b0ba91be2eda407bac.

## Results

# Parents perceive emotional display rules in parenting

Descriptive statistics and correlations among study variables are shown in Table 1. Means and standard deviations of each item of the scale "Perceived Emotional Display Rules in Parenting" are shown in Table 2 (left columns). As shown in this

Table 1. Descriptive statistics and correlation among study variables.

Display rule (show positive)   27.50 (4.68)   29.08 (5.73)   .46**   29.08 (5.73)   .46**   29.08 (5.73)   .46**   29.08 (5.73)   .46**   29.08 (5.73)   .46**   29.08 (5.73)   .46**   29.08 (5.73)   .46**   .44   Regulatory effort (show positive)   15.28 (5.92)   .12*   .16**   .16**   .44   .22**   .20**   .45   .44   .22**   .20**   .45   .44   .22**   .20**   .44   .22**   .20**   .44   .22**   .20**   .44   .22**   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .24   .		Variables	(QS) W	-	7	m	4	2	9	7	œ	6	<u>o</u>	=	12
negative) 29.08 (5.73)	<b> </b> _		27.50 (4.68)												
56.58 (8.91)	7	_	29.08 (5.73)	.46 <b>*</b>											
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38.21 (13.77) 13* .22* .21* .85* .94** 2.07 (0.68) 19* .23* .25* .39* .36* .41** 2.91 (1.21) 29* .12* .23* .19* .25* .25* .25* .28*  al role	2	ĕ	22.93 (9.28)	<u>*</u>	.22**	.20**	.63*								
2.07 (0.68) 1.9** 2.3** 2.5** 3.9** 3.6** 4.1** 2.91 (1.21) 2.9** 1.2* 2.3** 1.9** 2.5** 2.5** 2.8**  2.91 (1.21) 2.9** 1.1* 1.0 1.2* 5.5** 4.8** 5.6** 3.4** 1.3*  self 5.07 (7.19) 0.6 1.1* 1.0 5.6** 4.9** 5.7** 3.2** 1.6** 80**  up 4.24 (5.76) 0.5 0.4 0.5 5.6** 4.7** 5.6** 3.1** 1.2* 8.9** 81**  2.33 (3.19) 0.2 0.2 0.2 5.2** 3.7** 4.7** 2.8** 0.7 7.0** 6.8** 7.8**  out 2.4.14 (26.37) 0.8 0.9 1.0 5.9** 5.0** 5.0** 3.5** 1.4** 9.6** 91** 95**	9	Regulatory effort	38.21 (13.77)	<u>*</u>	.22**	.2 <u>I</u>	.85 <b>*</b>	.9 <b>4</b> **							
2.91 (1.21) 2.9** 1.12* 2.3** 1.9** 2.5** 2.5** 2.8**  al role	/	Surface acting	2.07 (0.68)	<u>*</u> 6	.23**	.25**	.39 <b>*</b>	.36*	<u>4</u> .						
al role 12.51 (12.29) 1.1* .10 .12* .55** .48** .56** .34** .13*  self 5.07 (7.19) .06 .11* .10 .56** .49** .57** .32** .16** .89**  up 4.24 (5.76) .05 .04 .05 .56** .47** .56** .31** .12* .89** .81**  2.33 (3.19) .02 .02 .02 .52** .37** .47** .28** .07 .70** .68** .78**  out 24.14 (26.37) .08 .09 .10 .59** .50** .59** .35** .14** .96** .91** .95**	ω	Deep acting	2.91 (1.21)	.29**	.I2*	.23**	<u>*6</u> 1.	.25**	.25**	.28**					
self 5.07 (7.19) .06 .11* .10 .56** .49** .57** .32** .16** .80**  up 4.24 (5.76) .05 .04 .05 .56** .47** .56** .31** .12* .89** .81**  2.33 (3.19) .02 .02 .02 .52** .37** .47** .28** .07 .70** .68** .78**  out 24.14 (26.37) .08 .09 .10 .59** .50** .59** .35** .14** .96** .91** .95**	6	Exhaustion in parental role	12.51 (12.29)	<u>*</u>	<u>e</u> .	.12*	.55*	.48* **	.56*	.34**	<u>*</u>				
up 4.24 (5.76) .05 .04 .05 .56** .47** .56** .31** .12* .89** .81** 2.33 (3.19) .02 .02 .02 .52** .37** .47** .28** .07 .70** .68** .78** out 24.14 (26.37) .08 .09 .10 .59** .50** .59** .35** .14** .96** .91** .95**	9	Contrast in parental self	5.07 (7.19)	90:	<u>*</u>	<u>o</u> .	.56 <b>*</b>	**64:	.57**	.32**	* <del>9</del> 1:	<b>*</b> 08.			
2.33 (3.19) .02 .02 .52** .37** .47** .28** .07 .70** .68** .78** out 24.14 (26.37) .08 .09 .10 .59** .50** .59** .35** .14** .96** .91** .95**	=	Feelings of being fed up	4.24 (5.76)	.05	9	.05	.56*	.47*	.56*	<u>×</u>	.12*	<b>%68</b> :	<u>∞</u> .		
out 24.14 (26.37) .08 .09 .10 .59** .50** .59** .35** .14** .96** .91** .95** .	12	Emotional distancing	2.33 (3.19)	.02	.02	.02	.52**	.37**	.47 <del>*</del>	.28**	.07	<u>*</u> 0/:	** <b>89</b> :	.78 <b></b> *	
	<u>~</u>	Global parental burnout	24.14 (26.37)	80.	60:	<u>e</u>	.59**	.50**	.59**	.35**	<u>*</u>	<b>*96</b> :	<u>*</u> 16:	.95**	*08·

\* $p \le .05$ . \*\* $p \le .01$ .

Table 2. Mean ar	nd standard	deviation	of	each	item	of	perceived	emotional	display	rule and
regulatory effort.							•			

	Emotional I	Display Rule	Regulatory Effort		
Scales/Items	М	SD	М	SD	
Show positive emotions (global) <sup>a</sup>	3.06	0.52	1.70	0.66	
Love	3.63	0.64	1.27	0.70	
Joy	2.51	0.87	1.84	1.00	
Нарру	2.58	0.86	1.76	1.04	
Serene	2.97	0.78	2.29	1.11	
Proud	3.34	0.75	1.28	0.73	
Compassionate	3.28	0.71	1.47	0.80	
Attentive	3.56	0.57	1.99	1.01	
Enthusiastic	2.88	18.0	1.80	1.05	
Satisfied	2.77	0.86	1.60	1.03	
Control negative emotions (global) <sup>b</sup>	2.91	0.57	2.29	0.93	
Stress	3.01	0.67	2.83	1.05	
Irritation	3.15	0.70	3.04	1.12	
Anxiety	3.03	0.71	2.56	1.26	
Sadness	2.28	1.01	2.23	1.29	
Anger	3.04	0.85	2.63	1.26	
Fear	2.68	0.88	2.09	1.18	
Hopelessness	3.00	0.79	1.71	1.46	
Distress	2.75	0.82	1.80	1.31	
Discouragement	2.76	0.85	2.07	1.29	
Rage	3.40	0.79	1.98	1.51	

<sup>&</sup>lt;sup>a</sup>Average score of the subscale "show positive emotions" (the summed score of all items divided by the number of items).

table, on average, parents agreed on the existence of emotional display rules in parenting (means of all items exceeded score value = 2, "neither agree nor disagree"). Mean comparison with scale value 0 and with scale value 2 also supported the existence of emotional display rules in parenting: the average score of global emotional display rules of parenting (M = 2.98, SD = 0.47) was significantly higher (t(346) = 118.33, p = .000, d = 6.34, 95% CI of mean difference [2.93, 3.03]) than the scale value = 0 (strongly disagree) and significantly higher (t(346) = 38.86, p = .000, d = 2.09, 95% CI of mean difference [0.93, 1.03]) than the scale value = 2 (neither agree nor disagree). The same was true for the subscale "showing positive emotions" (mean comparison with scale value = 0: M = 3.06, SD = 0.52; t(346) = 109.49, p = .000, d = 5.88, 95% CI of mean difference [3.00, 3.11]; mean comparison with scale value = 2: t(346) = 37.82, p = .000, d = 2.04, 95% CI of mean difference [1.00, 1.11]) and for the subscale "controlling negative emotions" (mean comparison with scale value = 0: M = 2.91, SD = 0.57; t(346) = 94.56, p = .000, d = 5.11, 95% CI of mean difference [2.85, 2.97]; mean comparison with scale

<sup>&</sup>lt;sup>b</sup>Average score of the subscale "control negative emotions" (the summed score of all items divided by the number of items).

value = 2: t(346) = 29.53, p = .000, d = 1.59, 95% CI of mean difference [0.85, 0.97]). Hypotheses 1a and 1b were thus supported.

## It requires effort from parents to comply with emotional display rules

As shown in Table 2 (right columns), parents indicated that they made efforts to comply with emotional display rules in parenting (means of all items exceeded score value = 1, "No effort at all"). Comparison of mean regulatory effort with scale value = 1 validated this observation: parents' average amount of effort for their emotion regulation in parenting (M = 2.01, SD = 0.72) was significantly higher than 1 (t(346) = 25.98, p < .001, d = 1.40, 95% CI of the difference [0.93, 1.09]). The same was true for the subscales "showing positive emotions" (M = 1.70, SD = 0.66; t(346) = 19.78, p < .001, d = 2.03, 95% CI of mean difference [0.63, 0.77]) and "controlling negative emotions" (M = 2.29, SD = 0.93; t(346) = 25.96, p < .001, d = 1.39, 95% CI of mean difference [1.19, 1.39]). Thus, hypotheses 2a and 2b were also supported.

# Parents comply with emotional display rules by using surface and deep acting

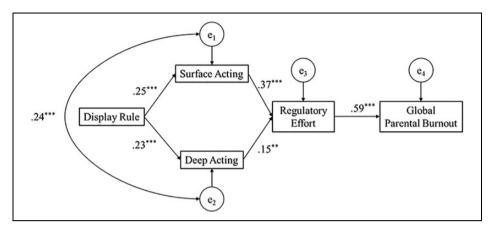
As shown in Table 1, perceived emotional display rules positively correlated with both surface acting (r(346) = .25, p = .000) and deep acting (r(346) = .23, p = .000). Hypotheses 3a and 3b were thus supported. Hypothesis 3c was also supported, in that surface acting positively correlated with deep acting (r(346) = .28, p = .000).

# Emotion management to meet the emotional display rules is effortful

As shown in Table 1, both surface acting (r(346) = .41, p = .000) and deep acting (r(346) = .25, p = .000) positively correlated with regulatory effort, thereby supporting hypotheses 4a and 4b. Comparison of the correlation coefficients indicated that the effect of deep acting on regulatory effort was lower than the effect of surface acting (z = 2.36, p = .009), thereby supporting hypothesis 4c.

# Regulatory efforts involved in complying with emotional display rules is related to higher vulnerability to parental burnout

As shown in Table 1, regulatory effort positively correlated with parental burnout (r(346) = .59, p = .000), thereby supporting hypothesis 5a. Mediation hypotheses 5b to 5d were supported by the path analysis model shown in Figure 2 (all coefficients are summarized in Table 3): although the chi-square ( $\chi^2(4) = 10.40, p = .034$ ) of our path analysis was significant, the other fit indices suggested that the proposed model had a good fit to the data (CFI = .97, TLI = .93, RMSEA = .07, SRMR = .03). Our proposed model in total explained 9% of parental burnout. Path coefficients were all significant in the proposed direction, and the relation between surface acting and regulatory effort was higher than the relation between deep acting and regulatory effort ( $\chi^2(1) = 6.89, p = .009$ ). The expected relations delineated in hypotheses 3–4 and 5a were thereby all



**Figure 2.** Path analysis model of associations between emotional display rule, surface/deep acting, regulatory effort, and parental burnout. *Note*. Coefficients presented are standardized linear regression coefficients. \*\*p < .01. \*\*\*p < .01.

**Table 3.** Coefficients and indirect effect of path analysis model of associations between emotional display rule, surface/deep acting, regulatory effort, and parental burnout.

	C+ 1	11 . 1				95% CI	
Relations	Std. estimate	Unstd. estimate	SE <sup>a</sup>	z	Р	LL	UL
Path coefficient							
Display rule $\rightarrow$ Surface acting	.25	0.02	0.00	5.07	.000	0.01	0.03
Display rule → Deep acting	.23	0.03	0.01	4.13	.000	0.02	0.05
Surface acting $\rightarrow$ Regulatory effort	.37	7.48	1.00	7.45	.000	5.51	9.44
Deep acting → Regulatory effort	.15	1.66	0.58	2.87	.004	0.53	2.80
Regulatory effort → Global parental burnout	.59	1.14	0.13	8.82	.000	0.88	1.39
Covariance							
Error (Surface acting) ↔ Error (Deep acting)	.24	0.18	0.04	4.16	.000	0.10	0.27
Indirect effect b							
Surface acting → Global parental burnout	.22	8.50	1.68	5.05	.000	5.20	11.80
Deep acting → Global parental burnout	.09	1.89	0.65	2.91	.004	0.62	3.16
Display Rule → Global parental burnout	.07	0.22	0.06	3.98	.000	0.11	0.33

Note. Std. estimate = standardized estimate; Unstd. estimate = unstandardized estimate; CI = confidence interval; LL = lower limit; UL = upper limit.

validated. Moreover, the indirect effects of perceived emotional display rules (via surface acting/deep acting and the regulatory effort they involved), surface acting (via regulatory effort), and deep acting (via regulatory effort) on parental burnout were all significant (ps < .05). Among them, the standardized indirect effect of surface acting was, as expected, higher than deep acting (difference = 6.61, SE = 1.88, z = 3.51, p = .000, 95% CI [2.92, 10.30]).

<sup>&</sup>lt;sup>a</sup>SE was adjusted by Satorra-Bentler adjustments.

<sup>&</sup>lt;sup>b</sup>Indirect effect testing was calculated by Satorra-Bentler adjustments.

## Discussion

Applying the EL framework from organizational psychology to parenting, this paper aimed to improve our understanding of the consequences of some tenets of positive parenting (e.g., Sanders & Mazzucchelli, 2017) for Western parents. The path analysis model, which integrated all proposed paths in reference to previous organizational literature (e.g., Brotheridge & Grandey, 2002; Brotheridge & Lee, 2002; Goldberg & Grandey, 2007; Grandey, 2003), supported the relevance of borrowing the EL framework to uncover some of the mechanisms by which current "parenting culture" (Lee et al., 2014) puts parents under pressure. This model revealed that parents perceive emotional display rules (i.e., the need to express positive emotions and control negative emotions in front of their children), which is associated with a higher regulatory effort and also higher vulnerability to parental burnout. Moreover, these results hold even when considering demographic variables as control variables (see the detailed discussion in the current article's Online Supplemental Material).

This paper contributes to both parenting and EL literature. As far as parenting is concerned, it suggests that although positive parenting has very beneficial effects for children (Chen et al., 2019), it comes at a cost for parents (Le & Impett, 2016). The current study goes a step further by examining the cost in terms of parental burnout. Given the detrimental effect of parental burnout on child development (see Mikolajczak et al., 2019), it may be ironic that positive parenting might ultimately negatively affect those it seeks to protect. The present study constitutes a call for researchers in parenting to find ways of reconciling the interests of parents with the well-being of children. Moreover, considering the prolonged/increased parent-child interaction due to the COVID-19 pandemic lockdown, it may be plausible that parents' suffering (e.g., from complying with emotional display rules) may have worsened (e.g., increasing the risk of burnout). Actually, the urgency for future studies to explore it has been addressed by leading scholars in the science community (Gruber et al., 2020). The current study provides a framework on which future research can base.

Through adapting the EL framework to parenting, we provided a model tying together the antecedents of emotion regulation (i.e., emotional display rules), emotion regulation (i.e., EL strategies), and consequences (i.e., parental burnout) in the parenting context. The valid translation of the framework implies that parental emotional experiences include not only felt and expressed but also required emotions. To the best of our knowledge, since the seminal call of Dix (1991) to examine the role of parental affect in detail, there has been rare/no empirical research in the field about required emotions (i.e., emotional display rules) in the parenting domain. As we described earlier, this underdevelopment may be due to the dramatic changes in parenting—comparing to previous generations, parents nowadays need to continuously adjust their behavior in accordance with society's prescriptions. Complying with emotional display rule may have become a new crux norm of the current parenting culture, and our study is the first to demonstrate its detrimental consequence in terms of parental burnout.

At last, although this research was not intended to contribute to the EL literature, it does in some ways. First, it confirms the potential of the EL framework, which has already given rise to thousands of studies in organizational psychology, to be translated

to the parenting context and give rise to research that should provide new directions to prevent parental burnout. Second, as reported in Table 2, parents in average report only little to average effort required to show or control each emotion. This may imply that even a small amount of effort can be as costly as to predict parental burnout. This finding of specificity (i.e., the possibility that even a small amount of effort felt can be very costly for parents) supports the relevance of examining emotion regulation/EL in the parenting context. Lastly, given the emerging evidence of the spillover of EL across different domains (e.g., Sanz-Vergel et al., 2012), future research could examine the association and even interaction between EL at work and regulatory efforts to comply with display rules in parenting: employees who are also well-intentioned parents may bear the highest risk of adverse consequences.

## Limitation and future directions

In spite of its strengths, this study suffers from several limitations that need to be acknowledged. The first limitation lies in the sample: most respondents were mothers. It is therefore unclear whether the EL framework is equally relevant to fathers. In particular, it is unclear if fathers equally perceive display rules and, if so, whether they also constitute a vulnerability factor vis-à-vis parental burnout for them. Considering the previous literature on gender difference in emotional expression/regulation (e.g., Chaplin, 2015), this limitation surely limits the generalizability of the results to men. Future studies would benefit from going deeper into this issue. The second limitation lies in the design, which is both cross-sectional and self-reported, resulting in higher shared variance. This being said, since our research result is echoing with Le and Impett's (2016), which relied on different research methods (i.e., experimental study and daily experience study), our result cannot be merely attributed to shared method variance.

Despite the above-mentioned limitations, our research opens exciting new directions in parenting and emotion psychology. The most obvious future direction would consist of probing alternative explanations for our research findings. To mention a few, first, there might be spillover of EL across contexts, i.e., parents may adopt maladaptive EL strategies (e.g., surface acting) more if they also prefer to adopt them in the organizational context, and vice versa, and thus contributes to one's ill-being (see Liu et al., 2018). Second, it is also possible that if parents are less skillful at general emotion regulation, they might adopt maladaptive EL in specific contexts more (Mikolajczak et al., 2007). Third, parents with different dispositions toward emotions may inherently require varying efforts to meet emotional display rules, leading to differential vulnerability to parental burnout (see Dix, 1991). Together, examining the potential confounding variables that account for our findings will prove particularly fruitful and contribute to our understanding of modern parents'/human's emotional experience.

To wrap up, adopting the EL framework—specifically describes how individuals conform to explicit emotional display rules for required and repeated social interactions—paves the way (Grandey & Sayre, 2019, p. 132) for researchers to examine whether emotion display rules exist in parenting, whether and how parents meet them, and whether this would predict parental burnout. In our study, this framework explains about 9% of parental burnout's variance. An essential future direction to refine the model

would consist in going beyond the two flagship strategies of the EL framework, as already suggested by many EL researchers in the work domain (e.g., Mikolajczak et al., 2009), and investigating the costs and benefits of other emotion regulation strategies (e.g., Le & Impett, 2016) that parents may use to comply with emotional display rules. Doing so might boost the explanation power of the model and will surely contribute to a better understanding of parental emotional experience.

#### **Author contributions**

Logan Hansotte (L.H.) shares co-first authorship with Gao-Xian Lin (G.-X.L.). Moïra Mikolajczak (M.M.), Dorota Szczygieł (D.S.), L.H., and Loes Meeussen (L.M.) developed the study concept and the study design from which the current data were drawn. L.H. collected the data. G.-X.L. proposed the analysis strategy and performed the data analyses and interpretation. G.-X.L. and M.M. drafted the manuscript. D.S., Isabelle Roskam (I.R.), and L.M. provided revisions. All authors approved the final version of the manuscript for submission.

## **Declaration of conflicting interests**

The author(s) declared the following potential conflicts of interest with respect to the research, authorship, and/or publication of this article: 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.

## Ethical approval

The study was carried out in accordance with the provisions of the World Medical Association Declaration of Helsinki. The study program was approved by the Ethics Committee of the Psychology Department of UCLouvain (Protocol no 17-19: Antecedents and consequences of Parental Burnout).

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## Open practices and data sharing

The experiment reported in this article was not 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/sauqh/?view\_only=43 86ebd4ed9d41b0ba91be2eda407bac.

### Open research statement

As part of IARR's encouragement of open research practices, the authors have provided the following information: This research was not preregistered. The data used in the research can be publicly posted. The data can be obtained at: https://osf.io/sauqh/?view\_only=43 86ebd4ed9d41b0ba91be2eda407bac. The materials used in the research cannot be publicly shared

but are available upon request. The materials can be obtained by emailing gao-xian.lin@uclou vain.be.

## Supplemental material

Supplemental material for this article is available online.

#### References

- Bai, S., Repetti, R. L., & Sperling, J. B. (2016). Children's expressions of positive emotion are sustained by smiling, touching, and playing with parents and siblings: A naturalistic observational study of family life. *Developmental Psychology*, 52(1), 88–101. https://doi.org/10.1037/ a0039854
- Bornstein, M. H. (2015). Children's parents. In Richard M. Lerner (Ed.), *Handbook of child psychology and developmental science* (Vol. 4). John Wiley & Sons.
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. Developmental Psychology, 28(5), 759–775. https://doi.org/10.1037/0012-1649.28.5.759
- Brotheridge, C. M., & Grandey, A. A. (2002). Emotional labor and burnout: Comparing two perspectives of "people work". *Journal of Vocational Behavior*, 60(1), 17–39. https://doi.org/10.1006/jvbe.2001.1815
- Brotheridge, C. M., & Lee, R. T. (1998). On the dimensionality of emotional labour: Development and validation of the emotional labour scale [Paper presentation]. First Conference on Emotions in Organizational Life, San Diego, USA.
- Brotheridge, C. M., & Lee, R. T. (2002). Testing a conservation of resources model of the dynamics of emotional labor. *Journal of Occupational Health Psychology*, 7(1), 57–67. https://doi.org/10.1037/1076-8998.7.1.57
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230–258. https://doi.org/10.1177/0049124192021002005
- Carreras, J., Carter, A. S., Heberle, A., Forbes, D., & Gray, S. A. O. (2019). Emotion regulation and parent distress: Getting at the heart of sensitive parenting among parents of preschool children experiencing high sociodemographic risk. *Journal of Child and Family Studies*, 28(11), 2953–2962. https://doi.org/10.1007/s10826-019-01471-z
- Chaplin, T. M. (2015). Gender and emotion expression: A developmental contextual perspective. *Emotion Review: Journal of the International Society for Research on Emotion*, 7(1), 14–21. https://doi.org/10.1177/1754073914544408
- Chen, Y., Haines, J., Charlton, B. M., & Van der Weele, T. J. (2019). Positive parenting improves multiple aspects of health and well-being in young adulthood. *Nature Human Behaviour*, *3*(7), 684–691. https://doi.org/10.1038/s41562-019-0602-x
- Dix, T. M. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin*, *110*(1), 3–25. https://doi.org/10.1037/0033-2909.110.1.3
- Faircloth, C. (2014). Intensive parenting and the expansion of parenting. In E. Lee, J. Bristow, C. Faircloth, & J. Macvarish (Eds.), *Parenting culture studies* (pp. 25–50). Palgrave Macmillan UK. https://doi.org/10.1057/9781137304612\_2
- Gabriel, A. S., Daniels, M. A., Diefendorff, J. M., & Greguras, G. J. (2015). Emotional labor actors: A latent profile analysis of emotional labor strategies. *Journal of Applied Psychology*, 100(3), 863–879. https://doi.org/10.1037/a0037408

Goldberg, L. S., & Grandey, A. A. (2007). Display rules versus display autonomy: Emotion regulation, emotional exhaustion, and task performance in a call center simulation. *Journal of Occupational Health Psychology*, 12(3), 301–318. https://doi.org/10.1037/1076-8998.12.3.301

- Goldin, P. R., McRae, K., Ramel, W., & Gross, J. J. (2008). The neural bases of emotion regulation: Reappraisal and suppression of negative emotion. *Biological Psychiatry*, 63(6), 577–586. https://doi.org/10.1016/j.biopsych.2007.05.031
- Grandey, A. A. (2003). When "the show must go on": Surface acting and deep acting as determinants of emotional exhaustion and peer-rated service delivery. *Academy of Management Journal*, 46(1), 86–96. https://doi.org/10.5465/30040678
- Grandey, A. A., Diefendorff, J. M., & Rupp, D. E. (Eds.). (2013). Emotional labor in the 21st century: Diverse perspectives on the psychology of emotion regulation at work. Routledge.
- Grandey, A. A., & Sayre, G. M. (2019). Emotional labor: Regulating emotions for a wage. *Current Directions in Psychological Science*, 28(2), 131–137. https://doi.org/10.1177/0963721418812771
- Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, 74(1), 224–237. https://doi.org/10.1037/0022-3514.74.1.224
- Gruber, J., Prinstein, M. J., Clark, L. A., Rottenberg, J., Abramowitz, J. S., Albano, A. M., Aldao,
  A., Borelli, J. L., Chung, T., Davila, J., Forbes, E. E., Gee, D. G., Hall, G. C. N., Hallion, L. S.,
  Hinshaw, S. P., Hofmann, S. G., Hollon, S. D., Joormann, J., Kazdin, A. E., ... Weinstock, L.
  M. (2020). Mental health and clinical psychological science in the time of COVID-19: Challenges, opportunities, and a call to action. *The American Psychologist*. Advance online publication. https://doi.org/10.1037/amp0000707
- Hochschild, A. R. (1983). The managed heart: Commercialization of human feeling. University of California Press.
- Hoghughi, M. (2004). Parenting—an introduction. In M. Hoghughi & N. Long (Eds.), *Handbook of parenting: Theory and research for practice* (pp. 1–18). SAGE.
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424–453. https://doi.org/10.1037/1082-989X.3.4.424
- Hu, L., & 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. https://doi.org/10.1080/10705519909540118
- Hülsheger, U. R., & Schewe, A. F. (2011). On the costs and benefits of emotional labor: A meta-analysis of three decades of research. *Journal of Occupational Health Psychology*, 16(3), 361–389. https://doi.org/10.1037/a0022876
- Kammeyer-Mueller, J. D., Rubenstein, A. L., Long, D. M., Odio, M. A., Buckman, B. R., Zhang, Y., & Halvorsen-Ganepola, M. D. K. (2013). A meta-analytic structural model of dispositional affectivity and emotional labor. *Personnel Psychology*, 66(1), 47–90. https://doi.org/10.1111/peps.12009
- Karnilowicz, H. R., Waters, S. F., & Mendes, W. B. (2019). Not in front of the kids: Effects of parental suppression on socialization behaviors during cooperative parent–child interactions. *Emotion*, 19(7), 1183–1191. https://doi.org/10.1037/emo0000527
- Kline, R. B. (2011). Principles and practice of structural equation modeling (3rd ed.). Guilford Press.

- Le, B. M., & Impett, E. A. (2016). The costs of suppressing negative emotions and amplifying positive emotions during parental caregiving. *Personality and Social Psychology Bulletin*, 42(3), 323–336. https://doi.org/10.1177/0146167216629122
- Le, B. M., & Impett, E. A. (2019). Parenting goal pursuit is linked to emotional well-being, relationship quality, and responsiveness. *Journal of Social and Personal Relationships*, 36(3), 879–904. https://doi.org/10.1177/0265407517747417
- Le, B. M., Sakaluk, J. K., Day, L. C., & Impett, E. A. (2019). How gender, age, and socioeconomic status predict parenting goal pursuit. *Journal of Social and Personal Relationships*, 36(10), 3313–3338. https://doi.org/10.1177/0265407518818375
- Lee, E., Bristow, J., Faircloth, C., & Macvarish, J. (2014). Parenting culture studies. Springer.
- Liu, X.-Y., Kwan, H. K., Wu, L.-Z., & Zheng, X.-M. (2018). Emotional labor and family quality: The role of work-family positive spillover. *The International Journal of Human Resource Management*, 29(6), 1113–1138. https://doi.org/10.1080/09585192.2016.1180313
- Manassis, K., Bradley, S., Goldberg, S., Hood, J., & Swinson, R. P. (1994). Attachment in mothers with anxiety disorders and their children. *Journal of the American Academy of Child & Adolescent Psychiatry*, 33(8), 1106–1113. https://doi.org/10.1097/00004583-199410000-00006
- Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52(1), 397–422. https://doi.org/10.1146/annurev.psych.52.1.397
- McRae, K. (2016). Cognitive emotion regulation: A review of theory and scientific findings. *Current Opinion in Behavioral Sciences*, 10, 119–124. https://doi.org/10.1016/j.cobeha.2016. 06.004
- Meeussen, L., & Van Laar, C. (2018). Feeling pressure to be a perfect mother relates to parental burnout and career ambitions. *Frontiers in Psychology*, *9*, 2113–2113. https://doi.org/10.3389/fpsyg.2018.02113
- 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. https://doi.org/10.1016/j.chiabu.2018.03.025
- Mikolajczak, M., Gross, J. J., & Roskam, I. (2019). Parental burnout: What is it and why does it matter? *Clinical Psychological Science*, 7(6), 1319–1329.
- Mikolajczak, M., Menil, C., & Luminet, O. (2007). Explaining the protective effect of trait emotional intelligence regarding occupational stress: Exploration of emotional labour processes. *Journal of Research in Personality*, 41(5), 1107–1117. https://doi.org/10.1016/j.jrp. 2007.01.003
- Mikolajczak, M., & Roskam, I. (2018). A theoretical and clinical framework for parental burnout: The balance between risks and resources (BR(2)). *Frontiers in Psychology*, *9*, 886–886. PubMed (29946278). https://doi.org/10.3389/fpsyg.2018.00886
- Mikolajczak, M., Tran, V., Brotheridge, C. M., & Gross, J. J. (2009). Chapter 11 using an emotion regulation framework to predict the outcomes of emotional labor. In E. J. H. Charmine, M. A. Neal, & J. Z. Wilfred (Eds.), *Emotions in groups, organizations and cultures* (pp. 245–273). Emerald Group Publishing Limited. https://doi.org/10.1108/S1746-9791(2009)0000005013
- National Center on Birth Defects and Developmental Disabilities (NCBDD). (2020). *Positive parenting tips*. National Center on Birth Defects and Developmental Disabilities (NCBDD), Centers for Disease Control and Prevention (CDC). https://www.cdc.gov/ncbddd/childdevelopment/positiveparenting/index.html

Richards, J. M., & Gross, J. J. (1999). Composure at any cost? The cognitive consequences of emotion suppression. *Personality and Social Psychology Bulletin*, 25(8), 1033–1044. https://doi.org/10.1177/01461672992511010

- Richards, J. M., & Gross, J. J. (2000). Emotion regulation and memory: The cognitive costs of keeping one's cool. *Journal of Personality and Social Psychology*, 79(3), 410–424. https://doi. org/10.1037/0022-3514.79.3.410
- Rodrigo, M. J. (2010). Promoting positive parenting in Europe: New challenges for the European Society for Developmental Psychology. *European Journal of Developmental Psychology*, 7(3), 281–294. https://doi.org/10.1080/17405621003780200
- Roskam, I., Aguiar, J., Akgun, E., Arikan, G., Artavia, M., Avalosse, H., Aunola, K., Bader, M., Bahati, C., Barham, E. J., Besson, E., Beyers, W., Boujut, E., Brianda, M. E., Brytek-Matera, A., Carbonneau, N., César, F., Chen, B.-B., Dorard, G., & Mikolajczak, M. (2021). Parental burnout around the globe: A 42-country study. *Affective Science*. 2(1), 58–79. https://doi.org/10.1007/s42761-020-00028-4
- 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*, 9, 758. https://doi.org/10.3389/fpsyg.2018.00758
- Roskam, I., Raes, M.-E., & Mikolajczak, M. (2017). Exhausted parents: Development and preliminary validation of the parental burnout inventory. *Frontiers in Psychology*, 8, 163. https://doi.org/10.3389/fpsyg.2017.00163
- Ryan, R. M., Martin, A., & Brooks-Gunn, J. (2006). Is one good parent good enough? Patterns of mother and father parenting and child cognitive outcomes at 24 and 36 months. *Parenting*, 6(2–3), 211–228. https://doi.org/10.1080/15295192.2006.9681306
- Sanders, M. R., & Mazzucchelli, T. G. (2017). The power of positive parenting: Transforming the lives of children, parents, and communities using the triple P system. Oxford University Press.
- Sanz-Vergel, A. I., Rodríguez-Muñoz, A., Bakker, A. B., & Demerouti, E. (2012). The daily spillover and crossover of emotional labor: Faking emotions at work and at home. *Journal of Vocational Behavior*, 81(2), 209–217. https://doi.org/10.1016/j.jvb.2012.07.003
- Schrodt, P. (2020). Emotion labor with parents as a mediator of family communication patterns and young adult children's mental well-being. *Journal of Family Communication*, 20(1), 66–81. https://doi.org/10.1080/15267431.2019.1661250
- Schrodt, P., & O'Mara, C. (2019). The development and validation of the emotion labor in families scale: Associations with emotion regulation, feeling caught, and relational satisfaction in parent-child relationships. *Communication Quarterly*, 67(4), 383–404. https://doi.org/10.1080/01463373.2019.1596143
- Verhellen, E. (2000). Convention on the rights of the child: Background, motivation, strategies, main themes (3rd ed.). Gent University, Children's Rights Centre, H.
- Wharton, A. S. (2009). The sociology of emotional labor. *Annual Review of Sociology*, 35(1), 147–165. https://doi.org/10.1146/annurey-soc-070308-115944
- Wharton, A. S., & Erickson, R. J. (1993). Managing emotions on the job and at home: Understanding the consequences of multiple emotional roles. *The Academy of Management Review*, 18(3), 457–486. https://doi.org/10.2307/258905
- Wharton, A. S., & Erickson, R. J. (1995). The consequences of caring: Exploring the links between women's job and family emotion work. *The Sociological Quarterly*, *36*(2), 273–296.