FI SEVIER

Contents lists available at ScienceDirect

Journal of Applied Developmental Psychology



Maternal emotion regulation strategies, internalizing problems and infant negative affect*



Erin S. Edwards ^a, Jacob B. Holzman ^a, Nicole M. Burt ^a, Helena J.V. Rutherford ^b, Linda C. Mayes ^b, David J. Bridgett ^{a,*}

- ^a Department of Psychology, Northern Illinois University, United States
- ^b Yale University, School of Medicine, Child Study Center, United States

ARTICLE INFO

Article history:
Received 13 August 2013
Received in revised form 7 December 2016
Accepted 14 December 2016
Available online 29 December 2016

Keywords: Emotion regulation Internalizing problems Bi-directional relations Infants Negative affect Temperament

ABSTRACT

Recent work has identified links between mothers' self-regulation and emotion regulation (ER) and children's social-emotional outcomes. However, associations between maternal ER strategies (e.g., reappraisal, suppression), known to influence internalizing problems in adults, and children's negative affect (NA) have not been considered. In the current study, the direct and indirect relationships, through maternal internalizing problems, between maternal use of ER strategies and infant NA are examined. The potential effects of infant NA on maternal internalizing difficulties are also considered. Ninety-nine mothers and their infants participated across three time points during the first year postpartum. Higher maternal suppression was indirectly related to higher infant NA, through maternal internalizing problems; lower maternal reappraisal also was indirectly related to higher infant NA through maternal internalizing problems. Infant NA at four months postpartum was related to mothers' internalizing problems 6 months postpartum. The implications of these findings for future research and intervention are discussed.

 $\hbox{@ 2016 Elsevier Inc. All rights reserved.}$

Temperament, defined as biologically based individual differences in reactivity (i.e., dispositional emotional response characteristics) and regulation (i.e., modulation of emotional responses), is shaped over time by heredity, maturation, and experience (Derryberry & Rothbart, 1988; Rothbart, Posner, & Kieras, 2006). Negative affect, one of the two higher-order dimensions of reactivity (Rothbart, 1988; Rothbart, Ahadi, & Evans, 2000), is an early-emerging aspect of temperament that is malleable during the first years of life. In addition, from infancy into adulthood, factor analytic studies have noted the consistent presence of three finer-grained subcomponents of the broad negative affect factor: anger/frustration/distress to limitations, fear, and sadness (Capaldi & Rothbart, 1992; Evans & Rothbart, 2007; Putnam, Ellis, & Rothbart, 2001; Rothbart, Ahadi, Hershey, & Fisher, 2003).

Negative affect increases across the first years of life, reaching a relative mean level of stability around the age of two years (Lemery, Goldsmith, Klinnert, & Mrazek, 1999; Putnam et al., 2001). For instance, Leve et al. (2013) noted increases in children's negative affect between 9 and 27 months of age. The subcomponents of negative affect show similar patterns of growth. Gartstein et al. (2010) found increasing trajectories of infant fearfulness over the first year of life in two separate studies using complementary methods of measuring fear. Frustration also increases during infancy (Putnam, Gartstein, & Rothbart, 2006) and then levels off by the pre-school period (Rothbart et al., 2003). The increasing stability, both in terms of rank-order and mean-level stability, of infant negative affect and its fine-grained components suggests that negative affect may be more susceptible to the influence of contextual factors earlier, rather than later, in childhood (Bridgett et al., 2009; Crawford, Schrock, & Woodruff-Borden, 2011; van den Akker, Dekovic, Prinzie, & Asscher, 2010).

Previous work has identified a number of contextual factors that influence the development of children's negative affect during infancy and early childhood. One such factor is interparental relationship quality. Specifically, higher interparental conflict has been consistently related to subsequent increases in children's distress (for a review, see Cummings & Davies, 2002). Interparental conflict is also related to more hostile parenting behaviors (Krishnakumar & Buehler, 2000), which may increase expressions of negative affect in children. Another contextual factor that has been implicated in the development of

[★] The authors would like to acknowledge the numerous research assistants whose many hours of data collection and processing were instrumental in the completion of this study. This project was supported, in part, by R21HD072574 from the Eunice Kennedy Shriver National Institute of Child Health & Human Development (NICHD). The content is solely the responsibility of the authors and does not necessarily represent the official views of the NICHD or the National Institutes of Health.

^{*} Corresponding authors at: Department of Psychology, Emotion Regulation & Temperament Laboratory, Psychology-Computer Science Building Rm. 400, Northern Illinois University, DeKalb, IL 60115, United States.

E-mail addresses: erin.shishilla@gmail.com (E.S. Edwards), dbridgett1@niu.edu (D.J. Bridgett).

children's negative affect is parenting. Specifically, less supportive parenting and overly-restrictive parenting behaviors are linked to heightened levels of children's negative affect (Paulussen-Hoogeboom, Stams, Hermanns, & Peetsma, 2007). Another contextual factor that has received considerable attention in the literature is maternal internalizing problems. For example, Austin, Hadzi-Pavlovic, Leader, Saint, and Parker (2005) linked maternal internalizing problems to higher parental report of child negative affect. Similarly, both Feldman et al. (2009) as well as Pauli-Pott, Mertesacker, and Beckmann (2004) linked higher maternal internalizing difficulties to elevated infant negative affect as rated by independent observers.

Maternal internalizing problems have also been related to more specific negative affect subcomponents in children. Specifically, infant fear has been related to maternal internalizing problems both when assessed by maternal report (Gartstein et al., 2010; Sugawara, Kitamura, Toda, & Shima, 1999) and laboratory observation (Gartstein et al., 2010). Maternal report of infant frustration has also been linked with maternal internalizing difficulties (Sugawara et al., 1999). Beyond relations with infant negative affect, maternal internalizing difficulties appear to act as a risk factor for the emergence and maintenance of children's psychopathology, including anxiety disorders (e.g., Beidel & Turner, 1997) and conduct problems (e.g., Chronis et al., 2007).

Although there is evidence to support a link between maternal internalizing problems and negative affect during both infancy and childhood, there is limited research examining maternal characteristics that may predict both maternal internalizing problems and infant negative affect. Maternal self-regulatory capacity, broadly defined, has been linked to a range of children's temperament-related outcomes. For example, maternal executive functioning appears linked to children's executive functioning (Cuevas et al., 2014) and maternal self-reported effortful control has been related to maternal report of infant orienting/regulation and toddler effortful control (Bridgett et al., 2011). Poorer self-regulatory processes also are related to less optimal parenting practices, which, in turn are often associated with adverse child outcomes (see Bridgett, Burt, Edwards, & Deater-Deckard, 2015, for a related review). Specifically, cognitively based regulatory processes, such as working memory, attention, cognitive flexibility, and/or inhibition, are linked to parenting behaviors such as intrusiveness (Cuevas et al., 2014), lower sensitivity (Chico, Gonzalez, Ali, Steiner, & Fleming, 2014), and harsh parenting (Deater-Deckard, Wang, Chen, & Bell, 2012). Associations between general emotion dysregulation and parenting behaviors have also been demonstrated, including poor discipline implementation (Kim, Pears, Capaldi, & Owen, 2009), low emotional availability (Kim, Teti, & Cole, 2012), and harsh punishment (Zalewski et al., 2014).

Although maternal self-regulatory processes have been related to factors that influence children's negative affect (e.g., temperament characteristics and parenting behaviors), little is known about how maternal use of emotion regulation strategies (i.e., processes employed to influence the experience and expression of emotions; Gross, 1998) may be linked to infant negative affect. Emotion regulation is a candidate maternal characteristic to consider given that emotional dysregulation is a risk factor for developing internalizing problems, such as anxiety and depression (Aldao, Nolen-Hoeksema, & Schweizer, 2010; Martin & Dahlen, 2005; Salters-Pedneault, Roemer, Tull, Rucker, & Mennin, 2006). Thus, it is possible that maternal emotion regulation is directly related to the development of infant negative affect. Alternately, maternal emotion regulation may be related to infant negative affect indirectly through maternal internalizing difficulties, given the well-established literature noting the relationship between emotion regulation and subsequent internalizing problems.

1. Emotion regulation and internalizing problems

Emotion regulation has been described as the intentional and unintentional processes by which an individual influences their experience and expression of emotion (Gross, 1998; Gross, 2002). This process model of emotion regulation distinguishes emotion regulation strategies by their time of implementation, either before (antecedent-focused) or after (response-focused) the emotion is experienced (Gross, 2002). One antecedent-focused emotion regulation strategy, reappraisal, is defined as the positive cognitive reframing of a situation before or shortly after the emotion response has been activated, in order to modulate the intensity of the emotional experience (Gross, 2002). One response-focused emotion regulation strategy, suppression, entails a post-hoc process by which an individual modifies a behavioral response to an evoked emotion (Gross & John, 2003). Given the timing of these emotion regulation strategies, reappraisal is believed to affect both the experience and expression of emotion whereas suppression affects only emotional expression (Gross, 2002; Gross & John, 2003).

Previous research has demonstrated that the habitual use of either reappraisal or suppression predicts unique outcomes (Goldin, McRae, Ramel, & Gross, 2008; Gross & John, 2003; Ehring, Tuschen-Caffier, Schnülle, Fischer, & Gross, 2010). The use of reappraisal is associated with greater experience and expression of positive emotion and decreased experience and expression of negative emotion (Goldin et al., 2008; Gross, 2002). Suppression decreases the expression of positive and negative emotions and decreases the experience of positive emotion, yet does not affect the experience of negative emotion (Gross & John, 2003; Gross, 2002). Importantly, differential use of these emotion regulation strategies is related to risk for internalizing difficulties (Aldao et al., 2010). Specifically, infrequent use of reappraisal is linked to increased depressive and anxiety symptoms (Garnefski & Kraaij, 2006; Martin & Dahlen, 2005; Moore, Zoellner, & Mollenholt, 2008; Salters-Pedneault et al., 2006) whereas increased use of reappraisal corresponds to decreased negative affect (Dillon & Pizzagalli, 2013; Goldin et al., 2008). In addition, frequent use of suppression is linked to increased depressive and anxiety symptoms (Haga, Kraft, & Corby, 2009; Kashdan & Steger, 2006) and is a common regulatory strategy used by individuals with a history of depression (Ehring et al., 2010). In sum, whereas prior research has established reappraisal as a more adaptive emotion regulation strategy, suppression appears to operate as a risk factor for internalizing problems.

In addition to having a potentially direct relation with infant negative affect, maternal emotion regulation strategy use may also have an indirect relation with infant negative affect via the infant's experience of less optimal parenting practices, often considered as stemming from maternal internalizing difficulties (see Bridgett et al., 2015 or Rutherford, Wallace, Laurent, & Mayes, 2015 for reviews). Maternal internalizing difficulties are linked to less optimal parenting behaviors, such as lack of positive engagement with children and heightened negative parenting behaviors (Lovejoy, Graczyk, O'Hare, & Neuman, 2000), which are known to predict adverse child socio-emotional outcomes. Recognizing that such internalizing problems may stem from emotion regulation strategy use and also predict adverse child outcomes, we considered the potential for maternal emotion regulation strategies to be indirectly linked with subsequent infant negative affect through maternal internalizing problems.

2. Child effects

To this point, we have considered the impact of contextual factors on children's temperament development. However, it is also important to consider potential child effects, recognizing that children have an important role in shaping their environment (Scarr & McCartney, 1983). Although work in this area has not been entirely consistent, some prior work has demonstrated that children's temperament characteristics, such as negative affect, can influence parenting and maternal internalizing difficulties. Heightened infant negative affect has been observed to predict less sensitivity in maternal parenting behaviors (Mills-Koonce et al., 2007). Additionally, increased infant difficulty, often considered as increased infant negative affect, has been observed

Download English Version:

https://daneshyari.com/en/article/4939182

Download Persian Version:

https://daneshyari.com/article/4939182

<u>Daneshyari.com</u>