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ORIGINAL PAPER

Intergenerational Transmission of Perceived Bonding Styles and Paternal Emotion Socialization: Mediation Through Paternal Emotion Dysregulation

Jia Yan[1] · Zhuo Rachel Han[1] · Peipei Li[1]

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Abstract We examined perceived parental styles, emotion socialization practices and emotion dysregulation among fathers from a community sample in order to understand the intergenerational transmission of normative parenting behaviors. The sample consisted of 217 fathers of school-age children ranging in age from 6 to 12 years. We used a cross-sectional design. The fathers completed a set of self-report questionnaires including parental boding instrument, difficulties in emotion regulation scale, and coping with children's negative emotion scale. The findings indicated that fathers' perceived parental care of their own parents (G1) was negatively linked to fathers' (G2) non-supportive responses to negative emotions shown by their children (G3) through its negative association with the father's (G2) emotion regulation difficulties, whereas fathers' perceived parental overprotection of their own parents (G1) was positively linked to fathers' (G2) non-supportive responses to negative emotions shown by their children (G3) through its positive associations with the fathers' (G2) emotion regulation difficulties. The current study contributed to the further understanding of individual differences in fathers' emotion socialization practices. The findings potentially shed lights on prevention and intervention efforts regarding limiting the expansion of maladaptive emotional parenting behaviors across generations.

✉ Zhuo Rachel Han
rachhan@bnu.edu.cn

[1] Beijing Key Laboratory of Applied Experimental Psychology, Beijing Normal University, Beijing 100875, China

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Introduction

Belsky (1984) proposed a process model illustrating that the developmental history of parents is an important predictor for their own parenting, and parental characteristics help explain the transmission of parenting across generations (i.e., from grandparents to parents). Since then, information from several sources concurs with Belsky leading to the hypothesis that parents would rear their child in the way they were reared (e.g., Belsky et al. 2005; O'Brien 2010; Pears and Capaldi 2001; Simonset al. 1991). Among research focusing on the intergenerational (dis-) continuities of parenting, whether and how parents who experienced abusive parenting would abuse their children is one of the most discussed topics (Lundberg et al. 2000; Schofield et al. 2013). For example, Simons et al. (1991) proposed that hostile personality and beliefs about physical discipline might explain the intergenerational transmission of harsh parenting. Pears and Capaldi (2001) argued that parental depression could be another mechanism of such transmission.

Although great effort has been expended exploring whether harsh parenting and maltreatment would be transmitted across generations, much less attention has been devoted to studying the transmission of normative parenting behaviors across generations. Exceptions include O'Brien's (2010) findings indicating that the parental styles of Irish immigrant mothers are related to their perceived parental styles of their own mothers. Another example was a study by Kitamura et al. (2009) conducted in a rural

Japanese sample of 1591 families, which demonstrated that one aspect of parenting practice, parental bonding styles (i.e., care and overprotection), of fathers' resembled those of grandparents', with personality traits playing the role of mediators.

Despite this advance in examining the impact of grandparents' normative parenting practice on parents' parenting, to our knowledge, no study has empirically investigated whether and how one's (G2) bonding style with their own parents (G1) would be associated with how they socialize their own children's (G3) emotions. Given that parental bonding style (i.e., overprotection and lack of care) has been consistently credited as being associated with children's poor emotional adjustment (Parker 1983; Koszycki et al. 2013; Young et al. 2013), grandparents' parental care and overprotection (G1) perceived by parents (G2) might be related to how they socialized their own children's (G3) emotions.

Parental bonding styles represent general patterns of childrearing that characterize parents' typical responses to a broad range of contexts and situations (Coplan et al. 2002; Darling and Steinberg 1993). Parker et al. (1979) categorized parental bonding styles into two main dimensions: 'care' and 'overprotection (i.e., control)'. Parental bonding styles were utilized to depict grandparents' (G1) daily parenting practices as perceived by the parents (G2).

Identified as the more salient dimensions of parenting, parental overprotection was broadly characterized as the encouragement of dependency, intrusion, and control of children's behavior (Parker et al. 1979). Overprotective parents tend to control every aspect of their children's lives, even in situations that do not warrant it, thereby leaving no freedom for their children (Rubin et al. 2002). Consequently, it is no surprise that parental overprotection has been consistently associated with the poor adjustment of children, including a series of psychosocial (e.g., shyness, wariness and fearfulness), psychopathological (e.g., clinical anxiety, depression, eating disorders, panic disorder and externalizing problems) and physiological (e.g., lower cardiac vagal tone at age 4) outcomes (Parker 1983; Koszycki et al. 2013; Young et al. 2013) in both community (Kiel and Maack 2012; Nishikawa et al. 2010) and at-risk (Gere et al. 2012) samples.

While overprotection focuses on a comparably negative dimension regarding parenting behaviors, care is construed as "affection, emotional warmth, empathy and closeness" (Parker et al. 1979). Not surprisingly, a lack of parental care might be linked to various undesired child outcomes. For example, Parker et al. (1995) found a stable association between low parental care received in youth and later life depression. Gerra et al. (2004) also reported findings that associated insufficient parental care with substance use in high school students. Experiences of low parental care have also been linked with child antisocial personality traits in adulthood (Reti et al. 2002). In summary, the previous literature indicates that parental overprotection and lack of care were both linked to negative child outcomes. The ineffective emotion socialization strategies of the next generation when they become parents themselves may be one of the negative outcomes.

Emotion socialization refers to the ways in which parents and caregivers shape youths' emotional competence, including emotion expression, recognition, and regulation. The socialization of emotions includes both direct responses to children's emotions, such as emotion coaching or direct feedback on emotional expression, and indirect messages that children receive about emotions via parental modeling or the familial emotional climate (Denham et al. 2007; Eisenberg et al. 1998). A range of environmental factors help shape the growth of emotional experience and emotion regulation in children, among which parents' emotion socialization in the family context is potentially the most influential (Halberstadt 1991). Among the different aspects of emotion socialization in the family context, parents' evaluations of children's emotion, or more specifically, the way parents respond to their children's negative emotional displays might be an important one. Parents' coping strategies with children's negative emotion have been consistently associated with a series of child developmental outcomes. Non-supportive responses (e.g., punitive or dismissive responses) of parents to children's negative emotions, for example, were linked to poorer emotion regulation abilities in children such as wide mood swings and impulsivity. In contrast, supportive responses were linked to more positive outcomes such as better parent–child relationships and emotional competence (Eisenberg et al. 1998).

Efforts in investigating parents' coping style with children's negative emotion has been devoted to the consequences of emotion socialization, treating emotion socialization as an independent variable (Wong et al. 2009). Nonetheless, there is a growing recognition that to further establish a more comprehensive framework of emotion socialization, attention is also warranted to investigate the antecedents of emotion-related socialization practices (Kovan et al. 2009).

Furthermore, socialization studies have not thoroughly explored fathers' guidance strategies compared to that of mothers (Bretherton et al. 2005). Bowlby (1969/1982; see also Fox 1967) once put forward a somewhat provocative suggestion that a woman and her children make the most basic human social unit, with societies differing in the degree to which fathers become attached. Bowlby's proposals inspired psychologists to extend their research to fathers. Findings indicated that fathers' roles might be pivotal in shaping emotional displays as well as having distinctive patterns (McDowell and Parke 2005).

There is already growing evidence demonstrating that fathers' emotion socialization practices are associated with child emotional competence (McDowell and Parke 2005). Fathers tended to show more negative expressiveness and less positive expressiveness than mothers (Halberstadt et al. 1995). Fathers also talked about emotional experiences with their children for a much shorter time than mothers did (Fivush et al. 2000) and used less emotion coaching with their children in middle childhood (Cassano et al. 2007), but were more likely to use dismissive and distractive strategies than mothers (Klimes-Dougan et al. 2007). Additionally, fathers were reported to be more likely to overlook their children's displays of negative emotions. They were also more likely to be punitive to their children's expressions of negative emotions or cope with their children's negative emotions with minimization (Cassano et al. 2007). Moreover, child-report data indicated that fathers were less supportive when they expressed their emotions (Garside and Klimes-Dougan 2002), especially when they expressed negative emotions, such as anger (Zeman and Shipman 1997). Additionally, father-child interactions also influenced children's emotional display in a broader sense. For example, Parke (1996) noted that father-child interactions were characterized by greater emotional arousal as well as more unpredictability and thus might provide greater opportunities for learning emotion regulatory skills within the context of these exchanges. In sum, it seems that the roles fathers play in the emotion socialization of children within family contexts is important and distinct from maternal roles. Their part in socializing children's emotion also deserves adequate attention, as fathers' emotion socialization practices have been repeatedly associated with child emotional functioning and adjustment (see McDowell and Parke 2005 for an example).

Additionally, because it is widely accepted that emotion regulation was both antecedent and consequence of parenting (Buckholdt et al. 2014; Jaffe et al. 2010), it is interesting know if emotion regulation is one mechanism through which fathers parental styles (G1) transmits to their offspring's emotion socialization practices (G2). Emotion regulation refers to "the extrinsic and intrinsic processes responsible for monitoring, evaluating, and modifying emotional reactions, especially their intensive and temporal features, to accomplish one's goals" (Thompson 1994). From the functionalist perspective, emotion regulation/dysregulation is considered in terms of the social context for that emotion, and only when emotional responses are not appropriate for a certain context or interfere with an individual's behavior and psychological functioning do we consider such behavior as a sign of dysregulation (Cole et al. 2008).

On the one hand, grandparents' (G1) parental styles might be associated with parents' (G2) emotion regulation abilities. For example, Piotrowski et al. (2013) found that overprotective parents tend to have children with less adaptive emotion regulatory abilities. This is because overprotective parents frequently provided unnecessary external support to their children, and thereby limiting their children's opportunities for developing the ability to apply optimal regulation strategies independently (Jaffe et al. 2010). In contrast, caring parents seemed to have children who could regulate their emotions more adaptively and acquire more constructive emotion regulation strategies (Ramsden and Hubbard 2002; Yagmurlu and Altan 2010). On the other hand, parents' emotion regulation abilities are linked to their emotion socialization practices. Morris et al. (2007) have reviewed the literature of emotion socialization and proposed a theoretical model indicating that parental emotion regulation could be one parental characteristics that may affect emotion socialization in the family context. Indeed, Buckholdt et al. (2014) empirically linked the association between parental emotion dysregulation and non-supportive parenting behaviors. Such an association is not surprising because parental emotion regulation difficulties (e.g., impulse control difficulties, non-acceptance of emotional responses and limited access to emotion regulation strategies) might limit parents' responses to their children's emotion expressions. When parents have difficulties controlling their own impulses, it might be harder for them to become engaged in constructive interactions with their children in emotionally salient events, especially when children are displaying negative emotions, thus applying more non-supportive emotion socialization practices. This mechanism has been noted by Belsky (1984), who found that parental characteristics could interpret the impact of grandparents' (G1) parenting on the parenting of the next generation. Taken together, it is reasonable to postulate that parents' (G2) difficulties in regulating their own emotions might serve as a mediator of the association between grandparents' (G1) parental style and parents' (G2) emotion socialization practices.

Given the paucity of research examining fathers' emotion socialization or intergenerational transmission of parental bonding styles from an emotional perspective, the current study aimed at examining the association between grandparents' (G1) parental bonding styles and fathers' (G2) emotion socialization in a community sample, as well as to identify the mechanisms through which these aspects of developmental history transmit to parents' socialization practices. Based on the literature review and theoretical considerations, it is hypothesized that fathers' (G2) non-supportive responses with children's negative emotion would be positively associated with perceived parental overprotection, but would be negatively associated with the perceived parental care of grandparents' (G1). Furthermore, a model was empirically examined in which the

association between the perceived parental styles of grandparents' (G1) and fathers' (G2) parental emotion socialization was hypothesized to be mediated by fathers' (G2) emotion regulation difficulties, thereby contributing to the existing literature about the individual differences of parenting behaviors.

Method

Participants

The participants included fathers from 217 families of two major cities in China. Forty-five families were excluded from the analyses due to misunderstanding of the instructions or failure to return all three scales. Included and excluded fathers did not differ significantly on SES of on levels of education. The remaining sample was consisted of 172 fathers (M age = 40.34, SD = 3.48). All of the fathers were the children's biological fathers, and 38.6 % of the families reported having an annual household income at or above average (i.e. about 60,000 RMB, approximately $10,000 USD) for dual-income families in the cities where information was collected.

Procedures

The participants in city A were recruited at a school-wide parental conference. The parents received an introductory and invitation letter from their children's head teachers. Following parental agreement to participate, the children were asked to take home a questionnaire packet with consent forms sealed in large envelopes. The participants returned the questionnaires to their child's head teacher upon completion. The participants in city B were recruited via flyers displayed around local schools. Interested parents were asked to pay a visit to a university laboratory where they completed the questionnaires. All procedures were approved by the university's Institutional Review Board.

Measures

The Parental Bonding Instrument

PBI (Parker et al. 1979) was utilized to assess the father's perceptions of relationships with their own mother/father within their first 16 years. The PBI consists of 25 items: 13 items of an overprotection dimension, with higher scores reflecting greater control (e.g., "My mother/father tries to control everything I do"), and 12 items of a care dimension, with higher scores reflecting greater warmth (e.g., "My mother/father speaks to me with a warm and friendly voice"). Fathers were asked to indicate how likely (on a 4-point scale from very likely to unlike) their parents were to perform the behavior. The PBI has been standardized in a series of studies and has been shown to have adequate test–retest and split-half reliability (Parker, as cited in Zweig and Paris 1991). The Chinese version also demonstrated satisfactory (α = .75 to .84) internal reliabilities for all the subscales (Gau et al. 2006). The internal consistencies for the Parental Bonding Instrument of the paternal report in the current sample were fathers' mothers' care α = .829; fathers' mothers' overprotection α = .763; fathers' fathers' care α = .581; and fathers' fathers' overprotection α = .683.

The Coping with Children's Negative Emotions Scale

CCNES (Fabes et al. 1990) included 12 scenarios that depict a range of negative emotionally evocative situations. Fathers were asked to indicate how likely (on a 7-point scale from very unlikely to very likely) they would be to respond in each of six alternative fashions. The scale demonstrated good (α = .68 to .75) internal reliabilities for all of the subscales in Chinese samples (Tao et al. 2010). The non-supportive responses included (a) fathers' distress reactions (α = .761), reflecting the degree to which fathers experience distress when their children express negative emotions (e.g., "feel upset and uncomfortable because of my child's reaction"); (b) punitive responses (α = .803), indicating the degree to which fathers respond with punitive reactions that decrease their exposure or need to address the negative emotions of their children ("tell my child that if she starts crying then she'll have to go to her room right away"); and (c) minimization responses (α = .766), reflecting the degree to which fathers minimize the seriousness of the situation or devalue the child's problem or distressed reaction (e.g., "tell my child that he/she is over-reacting"). For the purposes of the current study and to be consistent with the previous research (DeBoard-Lucas et al. 2010; Nelson et al. 2009; Suveg et al. 2011), while also reducing the number of analyses conducted, the minimizing reactions, punitive reactions, and distress reactions subscales were combined to form a composite measure of fathers' non-supportive reactions to their children's negative emotion expression (α = .851).

The Difficulties in Emotional Regulation Scale

DERS (Gratz and Roemer 2004) was employed to assess fathers' emotion awareness and regulation. DERS has not been previously used in Chinese samples and it was forward- and back-translated by Chinese psychology professors who were fluent in Chinese and English. The translators received assistance from English-speaking researchers for clarifications regarding difficult to translate

items. A pilot study with college students ($N = 70$) and parents ($N = 7$) was conducted to determine if adults had difficulty understanding and responding to the items in the questionnaires, and corresponding changes were made in the wording the difficult items. The DERS is a 36-item self-report questionnaire measuring difficulties with various dimensions of emotion awareness, expression and regulation. The frequency with which the various items apply to the respondent is indicated on a 5-point Likert scale, ranging from 1 (almost never) to 5 (almost always). The DERS consists of the following six subscales: (a) lack of awareness of emotional responses ($\alpha = .712$), (b) lack of clarity of emotional responses ($\alpha = .682$), (c) non-acceptance of negative emotional responses ($\alpha = .818$), (d) limited access to emotion regulation strategies perceived as effective ($\alpha = .785$), (e) difficulties controlling impulses when experiencing negative emotions ($\alpha = .717$), and (f) difficulties engaging in goal-directed behaviors when experiencing negative emotions ($\alpha = .659$). Cronbach's alpha in the current study was $\alpha = .885$ for the DERS total score. The total scores were used in the following analyses.

Data Analysis

First, the preliminary analyses examining the descriptive statistics and correlations among the study variables and the possible group differences in the study variables based on demographic characteristics were performed to address the necessity of controlling for certain variables in subsequent analyses. Next, the procedures recommended by Preacher et al. (2007) were performed to test the mediation models. Five thousand bootstrap resamples were used to generate 95 % confidence intervals that estimated the size and significance of the effects. The mediation procedures were performed using the SPSS PROCESS Macro (Hayes 2012). Based on the theoretical considerations, we examined whether paternal emotion dysregulation mediated the relationship between perceived parental styles (of grandmothers and grandfathers) and non-supportive emotion socialization (See Figs. 1, 2, 3 and 4).

Results

The rates of missing data ranged from 0 to 2.9 %, and all missing data were due to participants not responding to a certain item. The preliminary analyses examined the fathers' age, education level and social-economic status differences by all of the study variables. Fathers' age was not significantly associated with any of the study variables. A series ANOVAs showed that annual household income was significantly associated with fathers' perceived maternal overprotection, with fathers from a higher-income background (annual household income higher than 120,000 RMB, approximately 20,000 USD) reporting higher perceived maternal overprotection [F (9, 156) = 5.94, $p < .001$)]. Moreover, fathers' educational levels were significantly associated with emotion regulation difficulties, with fathers' with lower education levels displaying more emotion regulation difficulties [F (3, 140) = 4.04, $p = .009$)]. Of note, SES and fathers' education levels were entered into the subsequent mediational analyses as covariates, yet the effects of both of them were not significant in the models presented below.

See Table 1 for the correlations among the study variables. Fathers' emotion dysregulation was negatively associated with the perceived parental care of both grandmothers ($r = -.31$, $p < .001$) and grandfathers ($r = -.33$, $p < .001$). In contrast, fathers' emotion dysregulation was positively correlated with the perceived parental overprotection of both grandmothers ($r = .39$, $p < .001$) and grandfathers ($r = .43$, $p < .001$). Fathers' own non-supportive responses to their children were positively associated with their emotion regulation difficulties ($r = .43$, $p < .001$) as well as perceived maternal overprotection ($r = .20$, $p = .019$) and perceived paternal overprotection ($r = .23$, $p = .007$), whereas fathers' perceived maternal care ($r = -.19$, $p = .025$) and perceived paternal care ($r = -.31$, $p = .044$) were negatively associated with their own non-supportive emotional parenting.

Mediation models tested the hypotheses that perceived parental styles (i.e., care and overprotection) might exert an indirect effect on fathers' non-supportive emotion socialization practices through the parents' emotion dysregulation.

As shown in Fig. 1, the perceived parental care of grandmothers was indirectly related to fathers' non-supportive emotion socialization practices via fathers' emotion dysregulation, such that a higher level of care was associated with less emotion dysregulation, which in turn was related to fewer non-supportive emotion socialization practices (indirect effects point estimate = −.05, SE = .02, 95 % BCa CI = −.10 to −.02). The same mechanism also stands for the association between fathers' reported grandfather's care and fathers' non-supportive emotion socialization practices (see Fig. 3; indirect effects point estimate = −.06, SE = .02, 95 % BCa CI = −.13 to −.03).

As for overprotection, the grandparents' parental overprotection perceived by the fathers was indirectly related to the fathers' non-supportive emotion socialization practices via the father's emotion dysregulation, such that higher levels of overprotection were associated with higher emotion dysregulation, which in turn was related to more non-supportive emotion socialization practices (for the transmission of grandmothers' parental overprotection, see Fig. 2, indirect effects point estimate = .08, SE = .02, 95 % BCa CI = .04 to .13; for the transmission of

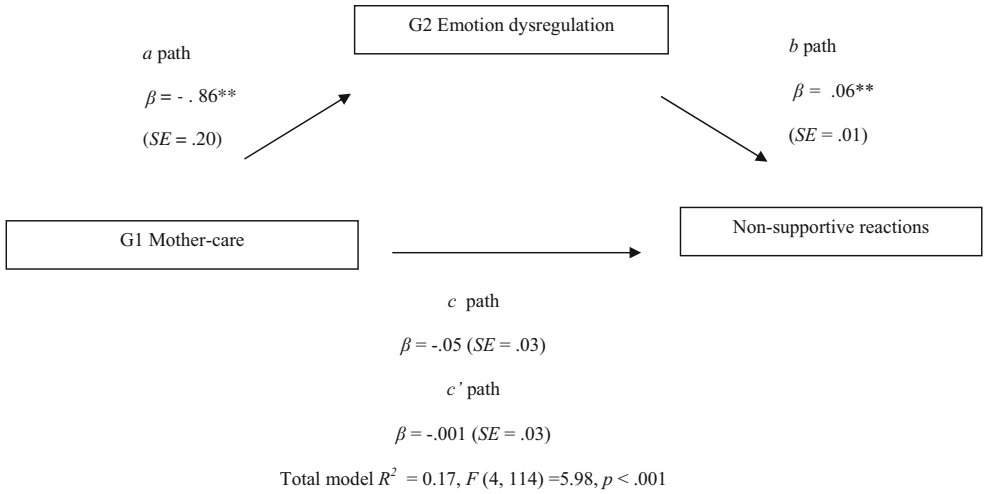

Fig. 1 Mediational model for associations between G1 mothers' care and G2's negative coping style of offspring negative behavior as mediated by the G2's emotion regulation difficulties. *$p < .05$; ** $p < .01$; *** $p < .001$

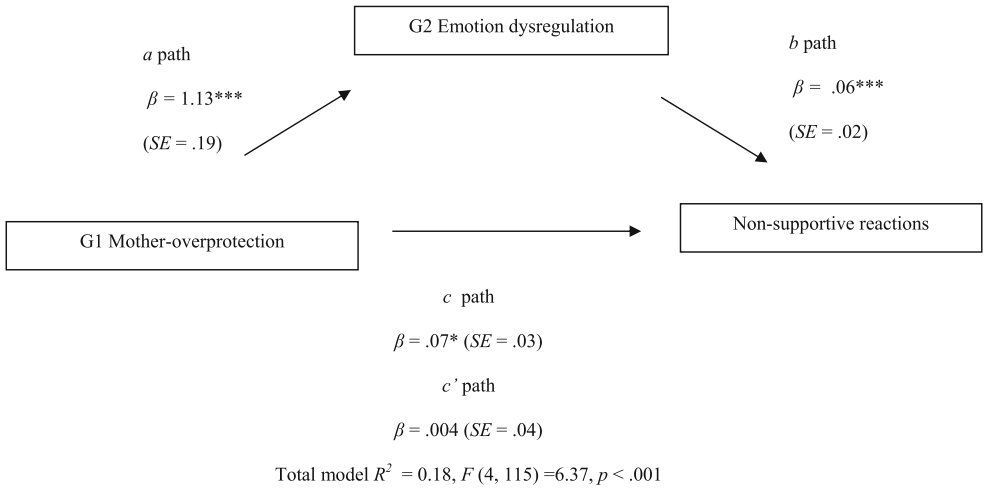

Fig. 2 Mediational model for associations between G1 mothers' overprotection and G2's negative coping style of offspring negative behavior as mediated by the G2's emotion regulation difficulties. *$p < .05$; ** $p < .01$; *** $p < .001$

grandfathers' parental overprotection, see Fig. 4, indirect effects point estimate = .07, SE = .02, 95 % BCa CI = .04 to .12).

Discussion

While previous research placed a great deal of attention on whether and how harsh parenting transmitted to the next generation in relatively at-risk samples, the current study broadened the existing findings by examining the association between the G1 parental styles and the G2 fathers' emotion socialization practices in a community sample as well as the mechanisms through which these aspects of parenting history transmitted to parenting practices.

The first research question was whether the parental styles of grandparents (G1) would be transmitted and thereby influencing the emotion socialization practices of the next generation (G2). As predicted, the present study found relations between the perceived parental styles of the G1 and non-supportive responses of the G2 to their children's negative emotions in directions consistent with our hypotheses. Specifically, the perceived parental care of G1 was associated with less non-supportive emotional parenting of fathers in G2, whereas perceived parental overprotection of G1 was associated with more non-supportive emotional parenting of fathers in G2. Our findings demonstrated consistent patterns with previous studies in that parental overprotection was linked to negative parenting among offspring, whereas parental care was linked

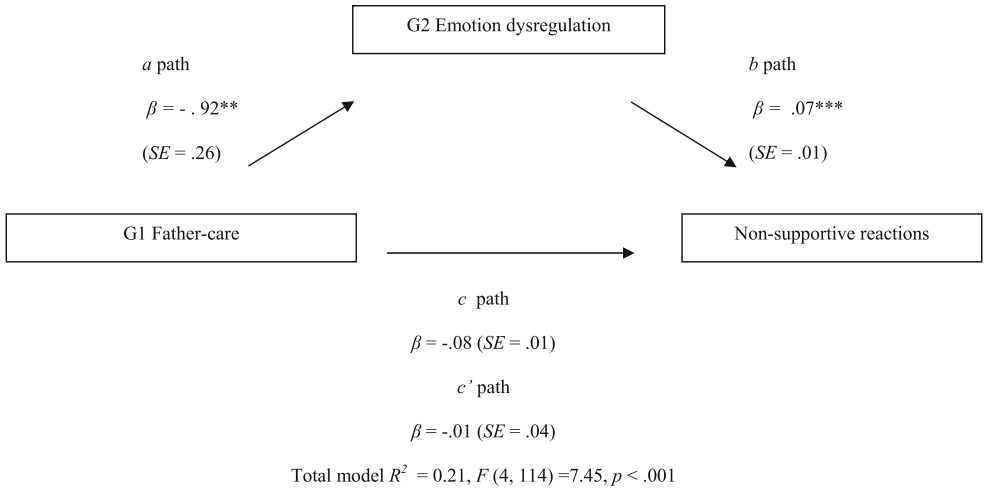

Fig. 3 Mediational model for associations between G1 fathers' care and G2's negative coping style of offspring negative behavior as mediated by the G2's emotion regulation difficulties. *$p < .05$; ** $p < .01$; *** $p < .001$

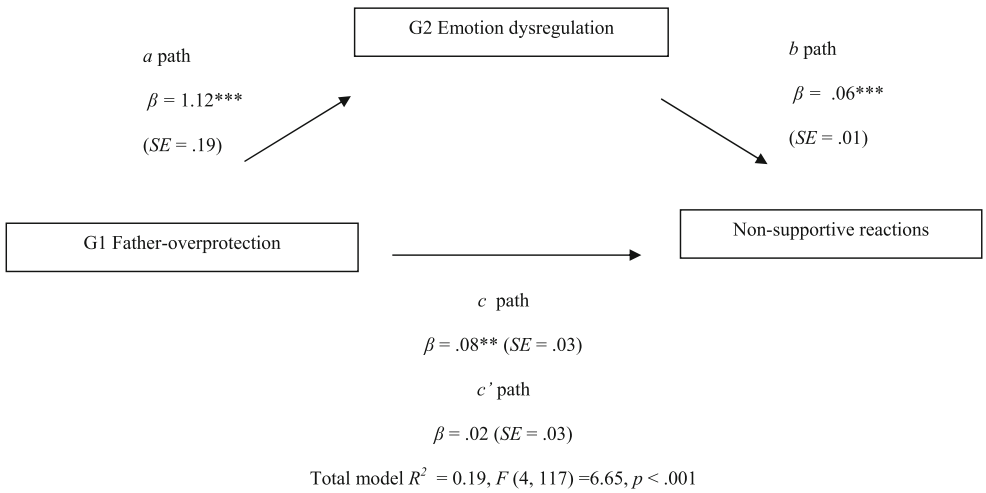

Fig. 4 Mediational model for associations between G1 fathers' overprotection and G2's negative coping style of offspring negative behavior as mediated by the G2's emotion regulation difficulties. *$p < .05$; ** $p < .01$; *** $p < .001$

Table 1 Means, standard deviations, and bivariate correlations of study variables

Variable	M	SD	Correlations				
			1	2	3	4	5
1. F-care	19.46	4.33					
2. F-over	12.08	5.36	−.16				
3. M-care	23.54	5.80	.67**	−.34**			
4. M-over	11.63	5.39	.45**	.20**	.72**		
5. Non-supp	9.47	2.10	−.17*	.23**	−.19*	.20**	
6. DERS	71.01	15.26	−.33**	.43**	−.31**	.39**	.43**

F-care, grandfathers' care; F-over, grandfathers' overprotection; M-care, grandmother' care; M-over, grandmothers' overprotection; Non-supp, fathers' non-supportive emotion parenting; DERS, fathers' emotion regulation difficulties

* $p < .05$; ** $p < .01$

to more positive parenting (Kitamura et al. 2009; Lundberg et al. 2000; Tanaka et al. 2009). Such findings also supported the theoretical model suggested by Bowlby (1969). Because parents tended to recreate the environment and the internal working models of the parent–child relationships that they experienced as a child, their developmental history during childhood was believed to affect their own parenting (Bowlby 1969). Moreover, the present study provided validation for a model in which G2's parenting history (i.e., the parental styles of G1) was linked to the emotional parenting behaviors of G2 (Belsky 1984). The results of the present study recognized that parental overprotection might be a risk factor of next generations' adaptive emotional parenting. On the contrary, parental care could serve as a protective factor against the maladaptive emotion socialization practices of the next generation.

The second research question was how the parental bonding style of the grandparents (G1) would be transmitted to the fathers' (G2) emotional parenting. Consistent with our hypothesis, we found that fathers' (G2) emotion dysregulation accounted for the transmission from fathers' bonding styles with their own parents (G1) to fathers' (G2) non-supportive emotion socialization practices with their children (G3). The findings of the present study supported our primary hypothesis that fathers' emotion dysregulation mediates the transmission from grandparents' (G1) parental overprotection and lack of care to fathers' (G2) non-supportive emotion socialization practices. Indeed, the parental care of grandparents (G1) was negatively associated with fathers' non-supportive emotional parenting via its association with fewer emotion regulation difficulties in the fathers (see Fig. 1 for grandmothers' care and Fig. 3 for grandfathers' care). In contrast, the association between grandparents' (G1) parental overprotection and fathers' (G2) non-supportive emotional parenting was mediated by fathers' (G2) increased difficulties in regulating their emotions (see Fig. 2 for grandmothers' overprotection and Fig. 4 for grandfathers' overprotection).

These meditational models partly explained the underlying mechanism of the transmission. Specifically, the results showed that fathers (G2) with overprotective or overcontrolling parents (G1) tended to have more difficulties in regulating their emotions. This association was validated both in a community sample (Coplan et al. 2009) and within a clinical sample of outpatients with Bipolar II and Borderline Personality Disorder (Fletcher et al. 2014). Although the cross-sectional design of the present study could not provide evidence for causal relationships between the constructs, it is reasonable to speculate that overprotective grandparents (G1) could sometimes deprive fathers (G2) of freedom and limit the chances for fathers to develop adaptive emotion regulation skills (Rubin et al. 2002), thus contributing to the difficulties in emotion regulation of the fathers (G2). Indeed, overprotective grandparents (G1) might prevent fathers (G2) from dealing with negative emotions in their own efforts, thereby limiting the opportunities for fathers to develop adaptive emotion regulation strategies (Fox and Calkins 2003; Jaffe et al. 2010).

Furthermore, the results of the present study suggest that fathers' difficulties in regulating emotions could in turn lead to non-supportive emotion regulation practices. Previous literature has documented the association between maternal emotion regulation and maternal emotional parenting (Morelen et al. 2014). For example, mothers who had more difficulties in regulating their emotions were more critical of their children's negative emotions (Morelen et al. 2014). The present study found that the link between emotion dysregulation and non-supportive emotional parenting also stood for fathers (see Table 1).

Fathers' non-supportive emotional parenting has been repeatedly recognized to be more frequent and severe than mothers' (Cassano et al. 2007; Garside and Klimes-Dougan 2002; Halberstadt et al. 1995; Klimes-Dougan et al. 2007; Zeman and Shipman 1997). However, the individual differences in emotion socialization practices among fathers were relatively understudied. Fathers' roles in emotion socialization in the family context are rather important to children's development of social competence (McDowell and Parke 2005). The present study built on a growing research of individual differences in parenting (Belsky et al. 2005; Kitamura et al. 2009; O'Brien 2010; Schofield et al. 2013) and focused on elucidating the antecedents of fathers' non-supportive emotional parenting. The present study also expanded the current knowledge about the protective and vulnerability factors of fathers' maladaptive parenting from the perspective of emotion and parenting history. It also provided empirical evidence for Belsky's (1984) hypothesis that adult childhood experiences impact the way they parent their own children through the mediation of parental characteristics. Indeed, this study was among the first to explain some of the mechanisms through which the parental style of G1 would impact the emotion socialization practices of the next generation. Specifically, we found that the emotion dysregulation of G2 helped explain the association between the perceived parental styles of G1 and G2's responses to G3's negative emotion display.

However, the present study had several limitations. First, fathers' retrospective reports of perceived parenting history are not completely reliable (Belsky et al. 2009). It is possible that parents who tend to be non-supportive of their children's negative emotion displays would recall themselves to be treated more negatively as a child, thereby inflating the association between G1's parental styles and

G2's non-supportive emotion socialization practices. It is also possible that parents with poorer emotion regulation abilities tend to assume that others treat themselves more negatively, thus exaggerating the associations between emotion dysregulation and perceived parental styles. Second, as both non-supportive emotional parenting practices and emotion regulation difficulties are not socially desirable (Simons et al. 1991), parents might underreport their negative responses to their children's negative emotions as well as their difficulties in regulating their own emotions, which could in turn lead to an underestimate of these associations. In sum, the present study would be strengthened by including observational data and multi-informant reports with longitudinal and prospective designs.

The present study contributes to a better understanding on the transmission of negative parenting across generations and on how positive parental styles of the first generation are linked to less negative parenting in the second generation in an East-Asian community sample. Further longitudinal studies with behavioral observation and reports from multiple resources are strongly encouraged to investigate whether the demonstrated relations among paternal parenting history and their own emotion socialization practices also exist in other culture contexts as well as if there are other mediating or moderating mechanisms besides paternal emotion dysregulation on such transmission.

The present study could potentially shed light on prevention and intervention efforts seeking to limit the expansion of maladaptive emotional parenting behaviors. Because perceived parental overprotection and lack of parental care seem to contribute to fathers' negative emotional parenting through their negative impact on fathers' emotion regulation, intervention for parents' emotion regulation abilities can be a feasible approach to promote parenting quality. In order to facilitate positive emotion socialization practices and to diminish negative emotion socialization practices in the familial contexts, further investigations into the effectiveness of intervention programs aimed at developing better emotion regulation skills on preventing negative parental styles from being transmitted to the next generation are encouraged. Such efforts could help improve the emotion competence of the next generation, especially for at-risk children whose parents suffered from maladaptive parental styles. Efforts should be taken to "break the intergenerational cycle" of maladaptive parenting and stop the victims from becoming a new generation of non-supportive parents themselves.

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