



Published in final edited form as:

J Fam Psychol. 2003 December ; 17(4): 598–606. doi:10.1037/0893-3200.17.4.598.

Harsh Parenting in Relation to Child Emotion Regulation and Aggression

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Abstract

This study presents a model of harsh parenting that has an indirect effect, as well as a direct effect, on child aggression in the school environment through the mediating process of child emotion regulation. Tested on a sample of 325 Chinese children and their parents, the model showed adequate goodness of fit. Also investigated were interaction effects between parents' and children's gender. Mothers' harsh parenting affected child emotion regulation more strongly than fathers', whereas harsh parenting emanating from fathers had a stronger effect on child aggression. Fathers' harsh parenting also affected sons more than daughters, whereas there was no gender differential effect with mothers' harsh parenting. These results are discussed with an emphasis on negative emotionality as a potentially common cause of family perturbations, including parenting and child adjustment problems.

Deater-Deckard and Dodge (1997) have suggested that the association between harsh parenting and child aggression depends on whether parental disciplinary actions are carried out in an emotionally controlled or an emotionally charged manner. Their findings implicate the emotional influence of harsh parenting on child aggression. Separately, other researchers have examined parental emotionality (e.g., Parke, Cassidy, Burks, Carson, & Boyum, 1992) as well as child emotional regulation (e.g., Eisenberg, Fabes, Guthrie, et al, 1996) and emotional security (Davies & Cummings, 1994). These findings suggest that children's emotion regulation is affected by their parents' punitive emotions and, in turn, affects an array of social behaviors, including aggression. Putting these separate developments together, the present study examines children's emotion regulation in mediating the effect of harsh parenting on child aggression.

In this study, we included both mothers and fathers and separated children by gender. This design strategy was intended to unveil potential gender interactions in the process and outcome of harsh parenting. Another feature of our study is that it was based on Chinese preschool children and their parents. Despite a growing interest in learning about psychological processes from diverse cultural samples, the Chinese and other Asian populations are understudied especially in the social developmental domain. The scant literature on Chinese parenting also

tends to focus on children's academic achievement (e.g., Leung, Lau, & Lam, 1998) or on social processes modulating academic development (e.g., Chen, Dong, & Zhou, 1997). These primarily draw on samples from late primary school to the middle school years. Few studies have included preschool children. In this study, we tested a model of harsh parenting that was hypothesized to affect child aggression both directly and indirectly through child emotion regulation. On a sample of 325 Chinese preschool children and their parents, the model that distinguished harsh parenting of mothers from that of fathers was also tested in sons and daughters separately.

The Mediating Effect of Emotion Regulation

Coinciding with the manifestation of other temperamental characteristics, emotion regulation comprises a set of competencies to modulate affective states (Shields & Cicchetti, 1998). Examples of emotion regulatory strategies include self-soothing, refraining upsetting events and provocative stimuli (Schwartz & Proctor, 2000), and inhibiting or initiating emotionally driven behavior (Eisenberg et al., 2001). These abilities are formed in the family context and transferred to the peer realm (Fabes, Eisenberg, & Miller, 1990). Parents shape children's acquisition of regulation skills through parent-child interactions (Parke et al., 1992) or by coaching and modeling (Carson & Parke, 1996; Davies & Cummings, 1994). As noted by Eisenberg et al. (1999), "parental coaching helps children to develop the ability to inhibit negative affect, to self-soothe, and to focus attention (including attention in social contexts)" (p. 514). "Parents who exhibit hurtful and hostile negative emotions frequently may model dysregulated behavior for children to imitate" (Eisenberg et al., 2001, p. 488).

A number of empirical studies support the link between the emotion regulatory abilities of parents and their children. For example, during constructive play activities, a mother's display of negative emotion was robustly correlated with her child's overall emotion regulation (Melnick & Hinshaw, 2000). In a series of investigations, Parke et al. (1992) demonstrated a systematic association between parents' emotion expression and regulation and their children's social skills. Carson and Parke (1996) also showed the reciprocal nature of parents' and children's emotion dysregulation and how it escalated during experimental play sessions. In another study of a similar age group of 4- to 6-year-olds, children's real-life reactions when angered and frustrated coincided with parental negative emotions (Eisenberg & Fabes, 1994).

Although these studies do not directly involve harsh or punitive parenting, the latter clearly carries the same negative or "punitive emotions" (Eisenberg et al., 1999, p. 531). Various descriptions as harsh, overreactive, emotionally negative, coercive, and controlling and authoritarian (Arnold, O'Leary, Wolff, & Acker, 1993; Deater-Deckard & Dodge, 1997), the specific acts comprising a cluster of harsh parenting behaviors include yelling, frequent negative commands, name calling, overt expressions of anger, and physical threats and aggression. These harsh parenting descriptions can be summarized into categories of coercive acts and negative emotion expressions. In other words, sometimes parents hit their children when they are angry or emotionally out of control (Patterson, 1982).

The available evidence suggests that there is a clear link between parenting styles and children's capacities for emotion regulation. The emotion dysregulation displayed by parents through harsh or punitive parenting affects the ability of their children to regulate their emotions (Eisenberg et al., 1999). Facilitated or even learned from parental socialization of negative emotions including harsh parenting (Gottman, Katz, & Hooven, 1997), children's emotion dysregulation, in turn, leads to an array of social problems in schools (Fabes, Eisenberg, & Miller, 1990). According to Sroufe and Fleeson (1986), aggressive physical and emotional interactions between parents and children form the basis for how children interact with others. Children transfer some of the negative affect and poor regulation strategies that they have

learned from parent–child interactions to their own interactions with peers, resulting in incompetent peer relations (Parke et al., 1992). Research has clearly implicated the link between child emotion dysregulation and child aggression (Schwartz & Proctor, 2000). Studies by emotion researchers also suggest the mediating effect of children’s emotion regulation in channeling the effect of emotion-related negative parenting practices on children’s social adjustment. For example, mothers’ expressions of negative emotions were related to children’s externalizing behavior problems in schools through the influence of the former on children’s emotion regulation (Eisenberg et al., 2001). Given this literature, we proposed that harsh parenting would lead to child aggression, partly through a direct effect of modeling, but also partly as an indirect effect that was mediated by child emotion dysregulation.

Gender of Parents and Children

The effect of gender as associated with the processes of parent–child relationships is somewhat perplexing partly because gender uncovers many psychological processes that may not be distinctly investigated, especially when both parents’ and children’s gender is involved. For example, whereas some studies have found mothers to engage in more disciplinary actions with children (Patterson, 1982) and to administer more physical punishment to their children than do fathers (Mulhern & Passman, 1981), others including a meta-analysis (Lytton & Romney, 1991) have found few or no gender differences. A large number of studies suggest that coercion and harshness from mothers’ parenting behaviors have a stronger effect on children than do fathers’ behaviors (e.g., Denham et al., 2000). According to another meta-analysis (Rothbaum & Weisz, 1994), the mean effect size of mothers’ harsh parenting on child externalizing is higher than that involving fathers’ harsh parenting. However, a different review has concluded that fathers’ harsh parenting has a stronger effect on child adjustment than does harsh parenting on the part of mothers (Loeber & Stouthamer-Loeber, 1986). The few studies that have included child’s gender have also obtained different findings. In Hart et al.’s (1998) study, fathers’ coercion was more strongly correlated with daughters’ than sons’ overt aggression, whereas mothers’ was similarly correlated with daughters’ and sons’ aggression. In Deater-Deckard and Dodge’s (1997) study, however, the average correlation between harsh parenting and child aggression across several age groups was higher when parents and children were of the same rather than different genders.

Different explanations and theories have also been proposed to account for these findings. The social learning theory (e.g., Bandura & Walters, 1959) postulates that the role modeling effect is facilitated by gender identification. Thus, parenting behaviors should have stronger effects on same-sex than opposite-sex children. A socialization theory on gender role differentiations also predicts that parents in general feel greater responsibility for the socialization of same-sex children (Huston, 1983) and thus exert closer control over them (Power & Shanks, 1989). However, because most children spend more time with their mothers than fathers (Russell & Russell, 1987) and because girls are less rigid in gender stereotyping than boys (Ruble & Martin, 1998), the potential gender identification effect is expected to be more evident with fathers and sons than with mothers and daughters (Lytton & Romney, 1991). In relation to harsh parenting and child aggression, a biological approach would also predict different arousals and responses from same-sex than opposite-sex parent–child pairings (Fabes, 1994).

Other mechanisms may also affect parent–child relations. One that is also pertinent to the emotional channeling of harsh parenting is that of attachment. Existing research suggests that attachment security does not vary as a function of a child’s gender (Ainsworth, 1973), especially in early childhood involving child–mother attachment (Rosen & Burke, 1999). Gender differences in attachment to fathers and in related child–father relationships also do not seem to appear until late childhood to adolescence (Lieberman, Doyle, & Markiewicz, 1999). This attachment research is also consistent with Davies and Cummings’s (1994) child

emotional security hypothesis. The emotional security theory does not postulate gender differences in young children's emotional responses to inter-adult conflict (Davies & Cummings, 1994). Cognitive differences in boys' and girls' coping with parental conflict have been observed only in older children and adolescents (Davies & Cummings, 1994).

These different gender-related mechanisms and findings suggest potential normative differences between the two genders in the proposed harsh parenting effects and children's responses to them, although the directions of the normative differences remain unclear. However, there is no theoretical or empirical basis to anticipate contradictory effects or responses from the two genders. Thus, the proposed harsh parenting model was tested in mothers and fathers and sons and daughters separately to explore differences between the genders and gender pairings.

Harsh Parenting Within Social Contexts

Pertinent social contexts within which the Chinese sample was taken need to be delineated to better understand harsh parenting in China. The larger context of the social and economic process of contemporary China has been that of Westernization, which took root in the dawn of the 20th century after invasions and semi-colonization by various European countries, was later accelerated in seemingly counterintuitive ways on account of the Soviet influence and the adoption of communism, and has since increasingly been part of mainstream globalization especially during the past 25 years of market reform. One example of the communist-style modernization is the attempt, partially successful, to eradicate traditional Chinese values. It is unsurprising that when participating mothers in the present study were asked whether Confucian ideologies including collectivism and self-constraint had any influence on their child-rearing beliefs and practices, none provided an affirmative answer. Of more immediate relevance to the present study, 60% of the fathers and 50% of the mothers of the sample had college degrees and most of the parents held professional jobs. Thus, the present community sample represented a middle-class population.

Also of note, 100% of the children in the present study were only children. A large number of studies on only children and their parents have been conducted by the mental health community in China. We reviewed this research as well as other Western literature on Chinese only children and drew two conclusions relevant to the present investigation. First, parents of Chinese only children seem to be in general better educated (e.g., Jiao, Ji, & Jing, 1996), more gender egalitarian (Liu, 1999), and more authoritative and less authoritarian (e.g., Hu, Wang, Zhu, & Wang, 1995) than parents of non-only children. Second, Chinese only children have been found to be more aggressive or externalizing (Tao, Qiu, Zeng, Xu, & Goebert, 1999), more self-centered or individualistic (Rosenberg & Jing, 1996), and more extroverted than non-only children (Cui, Gao, & Wang, 1994); however, other studies showed no clear social-behavioral differences between only children and non-only children (Rosenberg & Jing, 1996).

Many of the above described social contexts, for example, education and modernity, have been noted in the literature, although others are less well understood. However, there is no apparent theoretical basis for expecting that the process by which children respond to harsh parenting should be drastically different in the present population. With few exceptions (Chao, 1994), existing studies on Chinese parenting have shown that parental warmth and control have the same psychological properties in Chinese as they do in the West (Chen et al., 1997; Chen, Wang, Chen, & Liu, 2002). These and other studies (e.g., Yang et al., in press) have also shown that, consistent with the predominant Western findings, harsh parenting has the same negative effects on Chinese children resulting primarily in externalizing behaviors and emotions. There are also few East-West differences in the use of physical punishment (see Samuda, 1988, and Straus & Donnelly, 1994, for two similar surveys conducted in Hong Kong and the United

States, respectively). Our study of Chinese families was not intended as a comparative study across cultures. Rather, it was a study of a possibly universal process that was conducted within a single cultural context, just as most studies of American families have been conducted in a single, broad context. Whereas cross-cultural generalizations of the findings may be of interest for future inquiries, we first sought to understand the basic relations among harsh parenting, child emotion regulation, and aggression within a particular social context.

Method

Samples and Procedures

Samples were taken from two kindergartens in a southern Chinese city. Parents of the participating children completed a set of questionnaires at home, about themselves and their child. About 6 months after the initial questionnaire collection from the parents, teachers filled out a behavioral checklist on the children in their classes. In these kindergartens, each class had one teacher and two assistant teachers. All three adults independently rated each child in their class.

Parental consent was obtained from all the participating children at each stage of the research. Like most schools and kindergartens in China, these two kindergartens do not obtain written parental permission before involving children in special activities. To respect school practice, verbal consent was sought from the parents on multiple occasions during parent meetings. In addition, reassurance of confidentiality and voluntary participation was stated in other written communications with the parents.

The sample, which consisted of complete data from two parents and three teachers, included 325 children, of which 45% were female. This represents a return rate of above 95%. The age of the children ($M = 4.6$; $SD = 1.0$) ranged from 3 to 6 years, with the majority (65%) falling between 4 and 5 years. The average age of the parents was 34.6 years ($SD = 4.0$) for fathers and 32.0 years ($SD = 3.3$) for mothers. Sixty percent of the fathers and 50% of the mothers had a college education. The remainder had either a high school education (30% of fathers and 40% of mothers) or a middle school education (close to 10% of fathers and mothers). Across demographic and other variables used in the study, there were no statistical differences between children from the two kindergartens.

Measures

Harsh parenting—Both parents filled out the Chinese translation of the Parental Acceptance Rejection Questionnaire (Rohner, 1986). This translated form of the questionnaire has previously been used with Chinese parents (e.g., Chen et al., 2002). Reported in this study were 11 items measuring harsh parenting. Sample items included, “When my child does not behave, I will scold, kick, hit, get really mad with, or humiliate him/her.” The items were presented on a 4-point scale ranging from 1 (*rarely*) to 4 (*always*). Internal consistency was .66 and .71 for fathers’ and mothers’ responses, respectively.

Child emotion regulation—Mothers filled out the Emotion Regulation Checklist (Shields & Cicchetti, 1998). The 24-item scale was translated into Chinese by a psychology professor and proofread by two bilingual graduate students in psychology. Sample items included, “My child responds angrily to limit-setting by adults, can say when she/he is feeling sad, angry or mad, or is easily frustrated.” Items were rated on a 7-point scale ranging from 1 (*never true of child*) to 7 (*almost always true of child*). Consistent with existing studies (e.g., Schwartz & Proctor, 2000), some items were reverse coded to form a single scale, with higher numbers indicating emotion dysregulation. Its internal consistency reliability was .69.

Child aggression—One teacher and two assistant teachers of each child independently rated the child's school behaviors. The rating items were derived from the literature and have also been used with Chinese children of similar backgrounds (Schwartz, Chang, & Farver, 2001). In this study, seven ratings of bullying and aggressive behavior were included. The items are “the child bullies, makes fun of, pushes and hits, starts fights with, takes things away from, yells at other kids and calls other kids bad names.” The items were rated on a 5-point scale ranging from 1 (*not at all true of child*) to 5 (*very true of child*). The internal consistency of the seven items was .90. For all the scales described above, mean scores but not sums were computed.

Results

Means, standard deviations, and correlation coefficients of the variables used in the study are reported in Table 1. The correlation between harsh parenting and child aggression was positive and significant for both fathers and mothers, supporting the essential hypothesis and indicating that further tests of mediation of this effect could proceed. Table 1 also presents the same information for sons and daughters separately. Boys scored significantly higher on school aggression, $t(323) = 3.95, p < .001$, and emotion dysregulation, $t(323) = 3.62, p < .001$, than girls. Fathers' harsh parenting was significantly higher for sons than daughters, $t(323) = 4.66, p < .001$. Mothers' harsh parenting did not register the same gender difference. Nor was there a difference between fathers' and mothers' harsh parenting when sons and daughters were analyzed together.

To test all the hypotheses in a set of simultaneous equations, we combined individual items into parcels to achieve an acceptable sample-size-to-variable ratio. This approach, which has been shown to have satisfactory statistical properties (MacCallum, Widaman, Zhang, & Hong, 1999), is widely used in structural equation modeling studies (Bandalos & Finney, 2001). For the aggression construct, ratings on the seven items were averaged for each teacher to derive three composite ratings. Thus, this variable had three indicators representing the independent evaluations of the three teachers. For other constructs, two to four items were randomly combined to form item parcels. After parceling, three indicators represented each construct. The resulting sample size to parameter estimates ratio was 10 for the whole sample and 5 when the two genders were analyzed separately. These ratios fall within the range suggested for stable estimation (Bentler & Chou, 1987). Means, standard deviations, and correlation coefficients of the item parcels are reported in Table 2.

Results from testing the hypotheses in the whole sample are reported in Figure 1 and those from sons and daughters separately are presented in Figure 2. To facilitate interpretation, standardized regression coefficients are reported. The model testing based on the whole sample was supported by adequate goodness-of-fit statistics, $\chi^2(46, N = 325) = 58.84, p = .10$; goodness of fit = .97; adjusted goodness of fit = .95; root mean square residual = .04; $R^2 = .36$. The goodness-of-fit statistics were also adequate for sons, $\chi^2(46, N = 180) = 58.07, p = .11$; goodness of fit = .94; adjusted goodness of fit = .90; root mean square residual = .05; $R^2 = .32$, and for daughters, $\chi^2(46, N = 145) = 65.79, p = .03$; goodness of fit = .93; adjusted goodness of fit = .89; root mean square residual = .06; $R^2 = .34$. Although the chi-square test was significant for daughters, the ratio of chi-square to degrees of freedom was acceptable by both the 1.5 and 2.0 criterion (Bollen, 1989).

Viewing the results from the whole sample, we found that harsh parenting from both mothers ($\beta = .35$) and fathers ($\beta = .27$) affected child emotion regulation, which, in turn, led to school aggression ($\beta = .21$). These effects were significant. Fathers' harsh parenting also had a significant effect ($\beta = .36$) on child aggression. For mothers, however, the direct effect ($\beta = .03$) on child aggression was close to zero. Following Sobel (1988), we conducted

significance tests on the mediating effects. Estimates of the mediating effects of harsh parenting through emotion regulation and their standard errors (in parentheses) were .06 (.02) for fathers and .07 (.02) for mothers. Both effects were significant. The effect of harsh parenting of mothers on child aggression was almost entirely mediated by child emotion regulation. Fathers' harsh parenting had a stronger effect on child aggression than did that of mothers, whereas mothers had a stronger effect on child emotion regulation than fathers.

The same patterns of results were obtained from analyzing daughters and sons separately. Fathers' harsh parenting had a significant effect on both sons' and daughters' aggression, whereas mothers' harsh parenting affected neither. Mothers' harsh parenting affected daughters' (.38) and sons' (.33) emotion regulation similarly. The emotional responses of the two genders to fathers' harsh parenting were also similar (.24 from daughters and .21 from sons). However, fathers' harsh parenting affected sons' aggression (.34) more than daughters' aggression (.18).

Discussion

Our focus on the emotional influence of harsh parenting has been motivated by research on negative emotions and emotion regulation (e.g., Carson & Parke, 1996; Eisenberg et al., 1999; Fabes et al., 1999; Parke et al., 1992). These emotion researchers have analyzed the effect of affect communication in the family on the child's social behavior in and outside of the family. Their results suggest that children transfer negative emotional response strategies they have acquired from parental punitive emotions to other contexts, resulting in incompetent social behaviors. Viewed from the emotion regulation literature, our findings provide additional empirical evidence supporting parental socialization of negative emotions and children's transfer of emotional incompetence. From the perspective of harsh parenting research, our findings further clarify the paths through which harsh parenting channels its negative effects to children. Bridging these two corpuses of literature, our work provides a new perspective on harsh parenting. In addition to the view of harsh parenting as a form of behavior, harsh parenting can also be viewed as a form of affect communication. Its effect on children occurs both directly through behavioral modeling (e.g., Rothbaum & Weisz, 1994) and indirectly via emotion dysregulation. This perspective on harsh parenting is especially relevant when viewed within the widely adopted family systems (e.g., Cox & Paley, 1997) and child emotional security systems (e.g., Davies & Cummings, 1994) approaches. Conceptualized within these frameworks, the present findings suggest a broader implication—that underlying each behavioral perturbation is the undercurrent of emotional malfunctioning that may spill over into different marital, parental, and child systems. In terms of harsh parenting per se, this view is consistent with the common experience that when a parent hits or scolds a child, the parent communicates anger. The expression of anger, coldness, or hatred that accompanies the physical act of parental aggression could well be more detrimental than the act of aggression itself.

The conceptual distinction between emotional and behavioral effects of harsh parenting on children is in part supported by some of the gender findings. The effect of harsh parenting involving mothers was emotional, whereas for fathers harsh parenting had a stronger behavioral than emotional effect on children. The result was consistent when sons and daughters were analyzed together or separately. This finding suggests that potentially different contexts in which harsh parenting involving mothers versus fathers takes place may facilitate emotional versus behavioral reactions from children. Traditionally and across cultures, aggression is more acceptable in men than in women and, according to traditional gender role differentiations, fathers assume more disciplinary duties in child socialization than do mothers, whereas the maternal roles are perceived to be more on the caring and warm side of child socialization (Phares, 1996; Russell & Russell, 1987). Within this gender-role context, children may react

emotionally more negatively to aggression from the less expected party, that is, mothers. Within the same cultural context that discourages aggression from women more than from men, harsh parenting incidents involving mothers are likely the result of stronger negative emotions, for example, anger, than are similar incidents emanating from fathers. The latter speculation is consistent with the finding that a mood effect resulting from parents' discipline practice is more pronounced in mothers than in fathers (Denham et al., 2000). In Denham et al.'s experimental observation of parent-child interactions, maternal anger was also highly correlated with child reactions, whereas paternal anger was not. As Patterson (1982) has pointed out, children's resisting actions and reactions and mothers' coercive responses and intrusions are both likely driven by negative emotions.

Poorly regulated emotions coincide with harsh parenting especially during ongoing parent-child negative interactions (Denham et al., 2000). The fact that, up to middle childhood, mothers spend more than twice as much time alone with their children than do fathers (Russell & Russell, 1987) makes such negative parent-child exchanges involving mothers more likely than fathers. The role of a "traditional father" has been instrumental, and such fathers' involvement with children has been more limited and less emotionally expressive than that of mothers (Phares, 1996). Given that parents in the West continue to adopt traditional gender roles (Cowan & Cowan, 1992), such gender role differentiation could be equally as evident or more so among Chinese parents. Because Chinese fathers are seen as instrumental and well-reasoned authority figures (Ho, 1986) and are presented with more occasions to act accordingly (Chen et al., 2002), harsh parenting involving fathers is likely to channel a stronger behavioral modeling than emotional effect on children.

The potential gender role differentiation in child socialization is also corroborated by the finding that fathers' harsh parenting was more strongly related to sons' than daughters' aggression, whereas the same gender differential effect was not found with children's emotion regulation or with mothers' harsh parenting. Descriptive data also showed that whereas there was no difference in mothers' use of harsh parenting with children of the two sexes, fathers reported significantly higher use of harsh parenting with sons than with daughters. In general, fathers but not mothers interact with children of the same gender more often than they interact with the opposite gender (Phares, 1996). In Chinese families, fathers are believed to be especially responsible for sons' disciplinary issues (Chen, Liu, & Li, 2000; Ho, 1986). This finding is also in line with research suggesting a more salient behavioral modeling effect when the socializing agent and target are of the same gender (Maccoby, 2000) and a stronger gender identification effect in modeling behaviors by sons than daughters (Bussey & Perry, 1982). Similar gender differential effects involving fathers' harsh parenting and sons' aggression have been reported in both Western (Carson & Parke, 1996; Eisenberg et al., 1999) and Chinese (Chen et al., 2002; Yang et al., in press) studies.

Other explanations are possible. For example, biological differences in arousal and aggression between the two sexes may also explain the stronger effect of fathers' harsh parenting on sons' aggression (Fabes, 1994). That sons and daughters did not differ in their emotional reactions to harsh parenting is consistent with the attachment research that has shown no gender difference in young children's emotional ties with fathers (Lieberman, Doyle, & Markiewicz, 1999) or mothers (Rosen & Burke, 1999). The work on gender differences in relational versus overt aggression (Crick & Grotpeter, 1995) brings yet another perspective to the present findings. Although the present study has built on much existing work by exploring the interactions between parents' and children's gender, future work can improve on the present research by including studies designed to test hypotheses about specific gender-related theories.

In the present study, we identified an emotional and a behavioral effect of harsh parenting and some differences between mothers and fathers in rendering these two effects on children. However, we did not differentiate among the specific components of harsh parenting according to these two observed effects. One direction for future research lies in reconceptualizing harsh parenting as a multidimensional construct, consisting of the physical acts of aggression (e.g., hitting, shoving, or yelling) and the extent to which these acts are accompanied by the display of negative emotions. Another direction to build on the present study is to examine the conditions under which mothers and fathers engage in harsh parenting to determine, for example, whether harsh parenting from mothers is more likely a spur-of-the-moment response to child noncompliance and whether that of fathers is more likely to be instrumental and to serve disciplinary purposes than that of mothers.

The cross-sectional design of the study precludes an examination of the causal direction in parent–child relations. We made the choice to examine the potential parenting influence on child behavior and emotion regulation. However, we were unable to determine a “clean” parental effect by also considering the reciprocal influence of child emotionality and behavior on parenting. As shown in the literature (e.g., Eisenberg et al., 1999), the latter reciprocal force represents another viable mechanism underlying parent–child relationships. The construct of child emotion regulation is particularly complex (Thompson, 1994). This construct comprises factors both internal (Fox, 1989) and external to the child (Thompson, 1994). Our study focused on parenting as an important external influence of child emotion regulation. Future studies may include additional measures and/or a longitudinal design to conduct more comprehensive examinations of child emotion regulation and parent–child relationships.

Finally, our findings need to be replicated in Western and other Chinese populations. We only delineated but did not investigate some of the societal and cultural contextualizing factors. This is a limitation that also mars many of the existing Chinese and other cultural studies. Future studies should empirically investigate some of these social contexts to determine the degree to which they facilitate or inhibit harsh parenting and various other psychological processes. Our sample was also homogeneous in terms of education and other socioeconomic indicators that are normally correlated with harsh parenting. Future studies that include participants with more diverse backgrounds would increase the range of parenting practice variation and thus allow for better investigations of its effects.

Implications for Application and Public Policy

Several practical implications can be derived from our findings on the emotional channel by which harsh parenting affects children. On the basis of these findings, intervention efforts with high-risk children may be more effectively organized to focus, either directly or indirectly through work with parenting, on children’s emotion regulation. These findings also have implications for family policy and parenting practice. Traditionally, advocates for good parenting have aimed to change parents’ behavior, for example, banning spanking. More work may be needed to deal with parents’ negative emotions such as controlling anger. Our findings also inform the public policy debate regarding the right of parents to hit their children. The argument in favor of that right rests largely on the assumption that a child who is hit mildly is not being harmed in a lasting manner. The present findings suggest that parental harshness, even if it does not meet a criterion of physical maltreatment, may have an impact on a child’s ability to regulate emotion. This kind of impact may strengthen arguments against the use of even mild physical discipline especially when it is accompanied by negative emotions. Indeed, parents themselves may find it important to learn that their physical discipline is correlated with unintended adverse effects on their children’s behavior and emotion. Finally, our findings help integrate several areas of research, namely, those of harsh parenting (Patterson, 1982), parental emotionality (Parke et al., 1992), child emotion regulation (Eisenberg, Fabes, Guthrie,

et al., 1996), and security (Davies & Cummings, 1994), as well as family systems (Cox & Paley, 1997). From different angles, these otherwise separate lines of research all implicate negative emotionality as the common cause of family perturbations, including negative parenting, marital conflict, and child maladjustment. Intervention programs focusing on emotion management may prove useful across different contexts for different family issues. A recent formulation by Izard (2002) has also pointed toward the importance of directing interventions to children's regulation of emotion. Our study provides an empirical base for Izard's assertion. Whether children's emotion regulation can and should be targeted directly in intervention, or indirectly through an intervention focused on parenting, awaits further inquiry.

Acknowledgments

This study was supported by Direct Grant 2020541 from the Chinese University of Hong Kong and Earmarked Grant 4339-01H from the Research Grants Council, Hong Kong Special Administrative Region, China. Many thanks are given to the students, parents, and teachers of the participating kindergartens.

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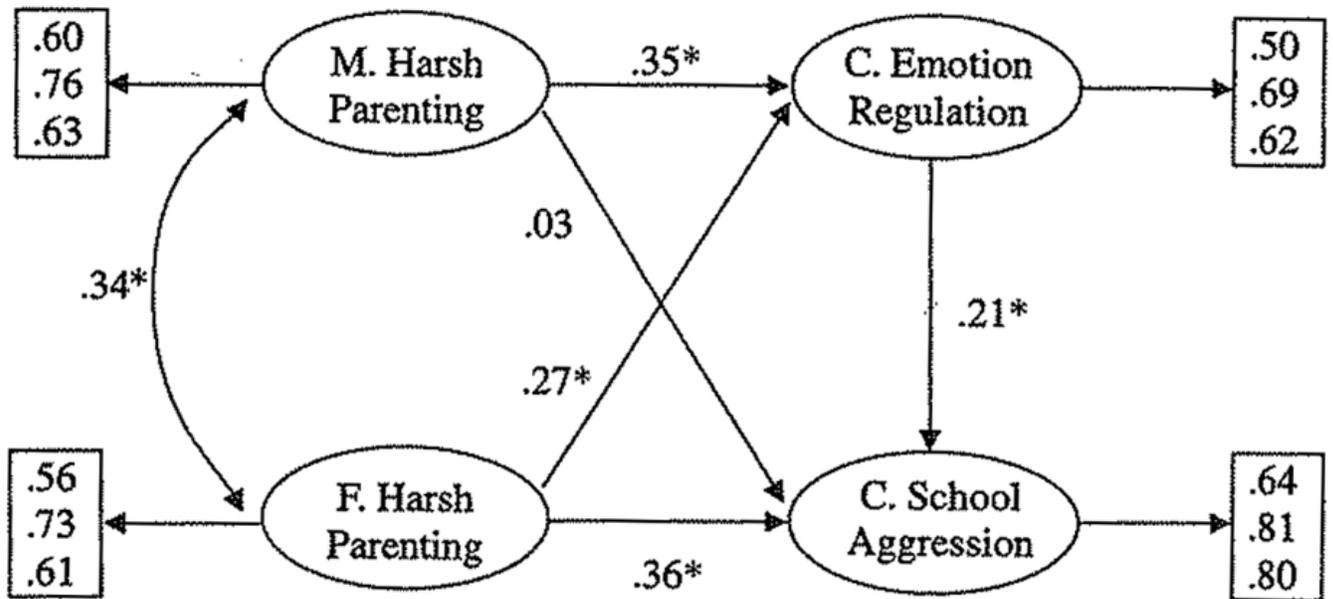


Figure 1. Results from structural modeling of harsh parenting. Numbers appearing in the boxes are standardized factor loadings, and numbers beside the arrows are standardized regression coefficients. M = mother; F = father; C = child. * $p < .05$.

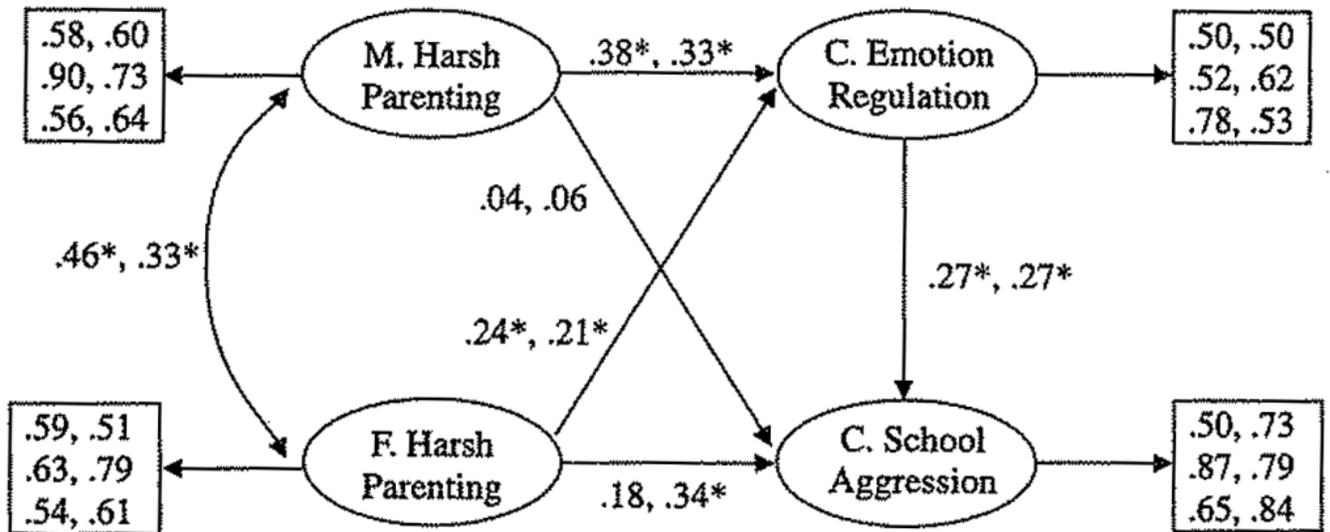


Figure 2. Results from structural modeling of harsh parenting for daughters and sons separately. Numbers appearing in the boxes are standardized factor loadings, and numbers beside the arrows are standardized regression coefficients. The first number in each series (to the left of the comma) is the value for daughters ($n = 145$), and the latter number (to the right of the comma) is the value for sons ($n = 180$). M = mother; F = father; C = child. $*p < .05$.

Table 1
Correlation Coefficients, Means, and Standard Deviations for Parenting and Child Variables

Variable	Total sample (N = 325)				Sons (n = 180) and daughters (n = 145) ^a			
	1	2	3	4	1	2	3	4
1. Father harsh parenting	—				—	.33	.14	.25
2. Mother harsh parenting	.27	—			.20	—	.08	.33
3. Child aggression	.27	.14	—		.27	.15	—	.15
4. Child emotion regulation	.31	.33	.25	—	.29	.31	.27	—
Total sample								
<i>M</i>	1.59	1.58	1.74	3.59				
<i>SD</i>	0.28	0.29	0.62	0.56				
Sons								
<i>M</i>					1.66	1.61	1.86	3.70
<i>SD</i>					0.29	0.29	0.67	0.53
Daughters								
<i>M</i>					1.51	1.55	1.59	3.47
<i>SD</i>					0.25	0.28	0.50	0.58

^aCorrelations for sons are below the diagonal, and correlations for daughters are above the diagonal.

Table 2
Correlation Coefficients, Means, and Standard Deviations of Item Parcels

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Father harsh parenting 1	—											
2. Father harsh parenting 2	.42	—										
3. Father harsh parenting 3	.34	.43	—									
4. Mother harsh parenting 1	.29	.19	.10	—								
5. Mother harsh parenting 2	.11	.26	.17	.45	—							
6. Mother harsh parenting 3	.04	.15	.18	.33	.50	—						
7. Child aggression 1	.12	.22	.09	.22	.17	.08	—					
8. Child aggression 2	.16	.23	.22	.12	.05	.01	.53	—				
9. Child aggression 3	.13	.23	.17	.11	.06	.04	.53	.64	—			
10. Child emotion regulation 1	.18	.22	.08	.16	.18	.19	.08	.16	.10	—		
11. Child emotion regulation 2	.15	.17	.22	.17	.17	.20	.12	.21	.18	.38	—	
12. Child emotion regulation 3	.21	.18	.21	.30	.21	.19	.18	.23	.20	.24	.41	—
<i>M</i>	1.76	1.60	1.42	1.82	1.46	1.47	1.75	1.71	1.76	4.33	3.19	3.26
<i>SD</i>	0.37	0.34	0.37	0.35	0.36	0.38	0.70	0.73	0.76	0.82	0.72	0.71

Note. Numbers following each variable represent the item parcels (see text for explanation).