# INFLUENCE OF EMOTION REGULATION AND EMPATHY ON THAI PARENTING BEHAVIOR: A PATH ANALYTIC MODEL

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Abstract: Research has identified emotion regulation and empathy as the two factors that have strong associations with positive parenting behavior. It remains unclear, however, how emotion regulation, empathy, and parenting behavior are related. As an attempt to fill in this gap in research, the present study explored the influence of emotion regulation strategies, namely expressive suppression and cognitive reappraisal, and empathy on the parenting behavior of Thai parents who live in Bangkok, Thailand. The research design of this present study was cross-sectional and correlational, using the path analysis via multiple regression analysis to test the hypotheses. Two path models were tested, for fathers and mothers separately. Two hundred fifty-two parents were recruited from three schools, four private organizations, and a parenting network to voluntarily participate in this study. Results revealed that the relationships among the variables were significantly different for fathers and mothers. Specifically, cognitive reappraisal had no direct effect on positive/negative parenting behavior, while the effect of expressive suppression on negative parenting behavior was significant only for mothers. Similarly, the mediating effect of empathy on emotion regulation strategies and parenting behavior was significant only for mothers. Both models, however, showed that empathy was a significant predictor of parenting behavior, which was consistent with what previous studies found. Future studies should continue to explore the predictors of parental empathy, including the emotion regulation strategies that are relevant to the Thai parenting context.

**Keywords:** Emotion Regulation, Empathy, Parenting Behavior

# Introduction

Researchers have identified parental empathy as an important protective factor against child abuse and maltreatment (Centre for Parenting and Research, 2006; Gordon, 2002; P & Z-Alb & Aiz & de Pa & Ai, 2003); it serves as a crucial foundation of sensitive caregiving (Dix, 1991; Gottman, 1997) and the development of attachment security (Fonagy, Steele, Steele, Moran, & Higgitt, 1991; Schore, 2001). Empathic parents put children's welfare before their own and are sensitive to children's verbal and non-verbal signals of distress. Low parental empathy, on

the other hand, is associated with an increased endorsement of physical punishment and ignoring (Brem & Sohl, 1995), more parental aggression (Letourneau, 1981; Zeifman, 2003), and neglect (de Paúl, Pérez-Albéniz, Guibert, Asla, & Ormaechea, 2008).

Parents' ability to effectively regulate their own emotions plays an important role in determining whether or not they will experience children's distress as an aversive emotional state (e.g., anxiety) or a cry for help that evokes an empathic response. When parents cannot effectively regulate own emotions, they tend to over-react to or dismiss children's emotions (Dix, 1991), which then serves as a model of inappropriate emotion regulation for the child (Morris, Silk, Steinberg, Myers, & Robinson, 2007).

There is evidence that parents' emotion regulation capacity, empathy, and parenting behavior are related; however, it is not clear how these three constructs are linked. This study attempts to narrow this gap in the literature by exploring any similarities or differences in how these variables are related to fathers and mothers' parenting behavior.

### Emotion Regulation and Empathy

Traditionally, theorists have conceptualized empathy as a state of mind (Hodges & Wegner, 1997), as a process that has either the cognitive (Hogan, 1969) or affective components (Baron-Cohen & Wheelwright, 2004; Batson, Fultz, & Schoenrade, 1987; Mehrabian & Epstein, 1972), or as a process that has both the cognitive and affective components (Davis, 1980; Decety & Jackson, 2004; Eisenberg & Eggum, 2009; Preston & de Waal, 2002).

More recently, empathy research has expanded into the realms of developmental neuroscience (Decety & Ickes, 2009; Siegel, 1999), particularly in the areas of parent-child relationship and self-regulation (Fonagy, Gergely, Jurist, & Target, 2002; Schore, 2001a; Sroufe, 2005). The dyadic interactions that take place within the first few years of life between parent, usually primary caregiver, and child are crucial in the development of emotion regulation and attachment security (Fonagy et al., 2002; Schore, 2001a). Rather than viewing empathy as a state or a process by itself, these theorists examine the relational aspect of empathy, specifically how it is developed since infancy, the conditions required for it to develop, and the consequences on the child should the conditions fail to facilitate this process (Fonagy et al., 2002; Schore, 2001b).

Theoretically, true empathy involves the ability to focus on another's, rather than own, emotional state and perspective without becoming overwhelmed by personal distress (Batson et al., 1987; Decety, Jackson, & Brunet, 2007; McDonald & Messinger, 2011). Emotion

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regulation is a factor that helps modulate empathic distress (Eisenberg et al., 1994; Eisenberg, 2010). According to Gross and Thompson (2007), the process of emotional regulation unfolds over time and can occur at any point from the moment that an emotion has been triggered to an actual response in the behavioral, experiential, and physiological domains. It involves antecedent-focused strategies, which occur before emotions have been fully activated and experienced, and response-focused strategies, which are employed after an individual has fully experienced the emotions. Cognitive reappraisal, an antecedent-focused strategy, is defined as "changing the way the individual thinks about a potentially emotion-eliciting situation in order to modify its emotional impact" (John & Gross, 2004). Expressive suppression, on the other hand, is a response-focused strategy, defined as "reducing emotion-expressive behavior once the individual is already in an emotional state" (John & Gross, 2004); usually this involves hiding the expression of true feelings, such as masking anger with a smiling face.

Cognitive reappraisal was associated with positive emotional experiences and decreased negative emotional experiences (Gross, 1998; Gross, 2002; Gross & Levenson, 1997), while suppression of emotions has been found to heighten the impact of negative emotions, interferes with successful adjustment, and also lower positive emotional experiences (Feldner, Zvolensky, Eifert, & Spira, 2003; Gross, 1998; Gross & Levenson, 1997). In terms of interpersonal relations, cognitive reappraisal was associated with increased rapport, affect sharing, and responsiveness, while expressive suppression was associated with decreased rapport, reduced responsiveness, and increased distraction (Butler et al., 2003; Butler, Lee, & Gross, 2007; Gross & John, 2003). In summary, cognitive reappraisal appears to encourage empathy, while expressive suppression appears to hinder it.

#### Emotion Regulation and Parenting

Dix (1991) proposed a model of affective processes in parenting which describes three sets of processes that occur in parenting-child interactions. Firstly, activation refers to how emotions are elicited as a result of an individual's appraisal of an event as beneficial or harmful as well as whether the event is significantly relevant to his or her goal. Parents' emotions also depend on how they appraise the situation, whether or not it promotes or frustrates their goals and concerns. Sometimes, parents' concerns are similar to those of the child, but other times, they are different. Once an emotion is activated, the next process is engagement, which prepares for response tendencies. Negative emotions, such as fear or anger may result in avoidance or preparation to attack, respectively. The third process is regulation, which refers to strategies that individuals use to manage the response tendencies and emotions that undermine their concerns. Applying this model to parenting, parents' response tendencies vary depending on which emotions have been activated. When parents' concerns and children's concerns do not match, and if parents appraise this discrepancy as a threat to their parenting goals, then negative emotions arise. On the other hand, if parents adopt the child's concerns, they no longer appraise the child's actions as threatening to parent goals, and positive emotions would arise (Dix, 1991).

From the perspective of Dix's affective processes in parenting, parents' failure to effectively regulate emotions, particularly negative emotions, leads to either insufficient or excessive emotional expressions. Previous studies have found associations between negative parental affect and hostile/coercive parenting behavior as well as positive affect and supportive/engaged parenting behavior (Rueger, Katz, Risser, & Lovejoy, 2011). Emotionally distressed mothers displayed significantly less warmth and positivity (Whaley, Pinto, & Sigman, 1999), were less sensitive (Muller-Nix et al., 2004), were less nurturing (Lindhout et al., 2006), and were more controlling (Lindhout et al., 2006; Muller-Nix et al., 2004) than non-distressed mothers; they were also found to be self-occupied and unresponsive (Dix, 1991) as well as being disengaged and intrusive (Field, Healy, Goldstein, & Guthertz, 1990). In terms of specific emotion regulation strategies, expressive suppression has been found to be less effective than cognitive reappraisal in promoting family warmth and healthy conflict resolution (Enebrink, Björnsdotter, & Ghaderi, 2013). Examining the social implications of expressive suppression and cognitive reappraisal, John and Gross (2003) discovered a positive and significant relation between expressive suppression and two measures of avoidance of attachment, while no significant relations were found between cognitive reappraisal and either measure of avoidance of attachment. It appears that cognitive reappraisal is a more effective emotion regulation strategy than expressive suppression in the context of parenting because it helps to regulate parental distress and encourages positive parenting behavior.

#### Empathy and Parenting

Empathy is an essential element of positive caregiving. When parents adopt an empathic state, they would be able to focus on children's concerns without experiencing this as a threat to their parenting goals (Dix, 1991). Emotioncoaching parenting is a parenting model that was developed based on research that linked empathy with sensitive, responsive parenting behavior (Gottman, 1997). Emotion-coaching parents are aware of the child's emotion, validate the child's feelings, and educate their child about emotions; they exercise healthy limit setting and help their child with problem-solving.

Attachment theorists emphasize the idea of sensitive and responsive parenting as the basis of secure attachment. Being sensitive and responsive means having the capacity to provide the reflective function (Fonagy et al., 2002), attune and resonate with the child's mental states (Siegel, 2010), as well as having the mental capacity to coregulate the child's intense emotional experiences (Schore, 2000). These processes cannot happen when parents fail to effectively regulate own emotions, because the child's distress will evoke strong internal reactions within the parents (Mills-Koonce et al., 2007).

Previous studies were consistent in finding associations between empathy and positive parenting behavior. Empathy was negatively related to negative parenting strategies (e.g., physical or psychological punishment, ignoring, and coercion) but positively related to positive parenting strategies (e.g., the use of reward; Brems and Sohl, 1995). In a study to investigate dispositional empathy in high-risk parents for physical child abuse, Pérez-Albéniz, & de Paúl (2003) discovered that high-risk parents showed statistically significant lower scores on measures of warmth, compassion, and empathic concern, but higher and statistically significant scores on a measure of personal distress than low-risk parents. These findings suggest that empathy is associated with more positive parenting behavior and less negative parenting behavior.

#### Emotion Regulation, Empathy, and Parenting

Empathy, and parenting are intricately related. Gondoli and Silverberg (1997) conducted a study to examine the mediating role of parental perspective-taking and mothers' parenting efficacy on maternal emotional distress and maternal responsiveness. They found that mothers who experienced high levels of emotional distress had lower levels of responsiveness as well as lower perceived parenting efficacy and parental perspective-taking. Moreover, mothers with higher levels of parenting efficacy and parental perspective-taking showed higher levels of responsiveness. From the attachment perspective, sensitive, responsive caregivers are those who have the capacity to provide high quality of reflective function; they can mentally contain the child's intense emotional experiences and respond in a caring manner (Fonagy & Target, 1997).

In summary, parents' emotion regulation capacity and empathy play an influential role on positive parenting. Research has suggested that fathers' contribution to parenting has a positive influence on children's development. While fathers' involvement seems to be more pronounced in the areas of children's social relations and life skills, mothers' involvement is oriented toward children's self-regulation and emotion regulation capacity (Easterbrooks & Goldberg, 1984; Gottman, 2007; Koestner, Franz, & Weinberger, 1990; Phares, 1992). This implies that there may be differences in how the variables are related to each other for fathers and mothers.

Thus, the present study explored the relationships between emotion regulation and parenting behavior, with a potential mediating role of empathy. The model was tested separately, for fathers and mothers, each with the following directional hypotheses: (1) emotion regulation was directly related to parenting behavior; (2) emotion regulation was indirectly related to parenting behavior, mediated by parental empathy.

#### Methods

#### **Participants**

The sample consisted of 252 participants (120 mothers, 132 fathers), with a mean age of 41.45 years. The majority of the participants were married (93.3%), with 5.6% divorced, 1.2% not married, and none widowed. Children were on average 8.41 years old; 53.3% were girls, and 46.7% were boys. The average number of children per participant was 1.62. Participants were recruited from central as well as the outskirts of Bangkok. The inclusion criteria was that the participants had at least one child aged 14 or below; this is when Thai children enter their middle adolescent years and begin to emotionally distance themselves from parents in their search for identity and independence (Piyasilp, 2008). For data analyses, those who passed the first criterion would also have to pass the second criterion, which excluded those with children older than 18 years old, as these individuals no longer fit the definition of "children" (Office of the Council of State, 2003).

# Measures

ERQ. The Emotion Regulation Questionnaire (ERQ; Gross & John, 2003) measures tendencies to regulate emotions using either cognitive reappraisal or expressive suppression. The scale has 10 items, with two subscales: cognitive reappraisal (items 1, 3, 5, 7, 8, 10) and expressive suppression (items 2, 4, 6, 9), each rated on a 7-point Likert scale (1 = Strongly disagree, 7 = Stronglyagree). Scores are kept separately and summed for each sub-scale, with higher sum indicating greater tendency to use the strategy. Both sub-scales have good reliability, with Cronbach's alphas ranging from .75 to .86 for Reappraisal and .68 to .83 for Suppression (Gross & John, 2003; Moore et al., 2008; Enebrink, Björnsdotter, & Ghaderi, 2013; Matsumoto et al., 2008). In this present study, the Cronbach's alphas were .775 for cognitive reappraisal and .559 for expressive suppression. One item from the expressive suppression subscale, due to low Corrected Item-Total correlation (i.e., < .33), and Cronbach's alpha became .560.

TEQ. The Toronto Empathy Questionnaire (TEQ; Spreng et al., 2009) was used to measure empathy. It has 16 items, scored on a 5-point Likert scale, where 0 = Never and 4 = Always. Negatively-worded items are reverse-scored (items 2, 4, 7, 10, 11, 12, 14, 15); total scores range from 0 to 64, with higher scores indicate higher levels of empathy. Internal consistency (Cronbach's alphas) ranged from .71 to .87, with the test-retest reliability over a three-week period of .73 (Lelorain et al., 2012; Spreng et al., 2009). In this present study, the Cronbach's alphas was .765. Two items were removed due to low Corrected Item-Total correlation (i.e., < .33), and Cronbach's alpha became .787.

PBI. The Parenting Behavior Inventory (PBI; Lovejoy et al., 1999) was used to measure parenting behavior. The 20-item scale has two sub-scales: supportive/engaged (positive) parenting behavior and hostile/coercive (negative) parenting behavior. Items are scored on a 6-point Likert scale, where 0 = Not at all true/I do not do this and 5 = Very true/I often do this. Possible scores range from 0 to 50 for each subscale, with higher scores representing greater levels of the behavior. Cronbach's alphas ranged from .82 to .95 for the supportive/engaged sub-scale and .62 to .93 for the hostile/coercive sub-scale (Honaker, 2007; Pineda, 2008; Skopp, 2007; Weis & Lovejoy, 2002). In this present study, the Cronbach's alphas were .857 for the supportive/engaged sub-scale and .794 for the hostile/coercive sub-scale. Two items were removed from the hostile/coercive sub-scale, due to low Corrected Item-Total correlation (i.e., < .33), and Cronbach's alpha became .822.

#### Procedures

This study used a battery of three questionnaires, which were back-translated into Thai language by a panel of three bilingual translators using acceptable standards. The focus of translation was on cross-cultural and conceptual, rather than on linguistic/literal equivalence. Participants were asked for consent before self-administering the questionnaires at home or with the presence of trained research coordinators. The informed consent form included information about the purpose of the study, assurance of confidentiality and anonymity, and contact details of the researcher. Permission letters were sent to organizations and schools, before private the questionnaire packets were handed out. The order of presentation of the questionnaires was counterbalanced to control for order effects. The participants received no incentive for the completion of the surveys.

### Design and Analysis

The design of the present study was correlational via path analysis. Preliminary analyses involved descriptive statistics, scale reliability analysis, and correlations analysis. The main analyses used path analysis via regression analysis to test the hypothesized direct and indirect effects, with a mediating role of empathy, of emotion regulation on parenting behavior. Two path models were presented.

### Results

### Descriptive Statistics and Correlations

Descriptive statistics, reliability coefficients, and correlations among the measured variables are presented in Table 1. As expected for both parents, empathy was significantly, positively correlated with supportive /engaged parenting behavior (r = .386, p < .01 for fathers, r = .431, p < .01 for mothers) and significantly, negatively correlated with hostile/coercive parenting behavior (r =-.184, p < .05 for fathers, r = -.425, p < .01 for mothers), although less so for fathers than mothers. Also expected, cognitive reappraisal was positively related to empathy, but this relationship was significant only for mothers (r = .187, p < .05). Cognitive reappraisal was also significantly, positively related to supportive/engaged parenting for both fathers (r = .181, p < .05) and mothers (r = .219, p < .05). An unexpected finding in this sample was the significant, negative correlation between expressive suppression and hostile/engaged parenting behavior mothers (r = -.228, p < .01), while the same relationship was insignificant for fathers.

<b>x</b> x /	1	2	3	4	5
Fathers					
М	4.51	5.04	2.93	1.80	4.10
SD	0.93	0.95	0.47	0.89	0.69
1. ES	-	0.316**	0.000	- 0.008	0.051
2. CR	0.316**	-	0.150	0.108	0.181*
3. EMP	0.000	0.150	-	- 0.184*	0.386**
4. HCP	- 0.008	0.108	- 0.184*	-	0.073
5. SEP	0.051	0.181*	0.386**	0.073	-
Mothers					
М	4.39	5.18	2.98	1.96	4.10
SD	1.05	0.95	0.44	0.91	0.69
1. ES	-	0.258*	0.085	- 0.228**	0.024
2. CR	0.258*	-	0.187*	- 0.147	0.219*
3. EMP	0.085	0.187*	-	- 0.425**	0.431**
4. HCP	- 0.228**	- 0.147	- 0.425**	-	- 0.235**
5. SEP	0.024	0.219*	0.431**	- 0.235**	-

 

 Table 1: Correlations, Means and Standard Deviations of Expressive Suppression, Cognitive Reappraisal, Empathy, Hostile/Coercive parenting, and Supportive/Engaged parenting by Gender

*Note.* ES = Expressive Suppression; CR = Cognitive Reappraisal; EMP = Empathy; HCP = Hostile/Coercive Parenting; SEP = Supportive/Engaged Parenting.

\* p < .05 (2-tailed). \*\* p < .01 (2-tailed).

A positive and significant correlation was observed between cognitive reappraisal and expressive suppression for both fathers (r = .316, p < .05) and mothers (r = .258, p < .01). Meanwhile, the relationship between the two domains of parenting behavior was significant and negative for mothers (r = - .235, p < .01), although this same relationship was insignificant for fathers.

### Gender Differences on the Main Variables

GLM Multivariate Analysis of Variance (MANOVA) was conducted to test the effect of gender differences on the five variables of expressive suppression, cognitive reappraisal, empathy, hostile/coercive parenting, and supportive/engaged parenting. Results indicated that there were no significant gender differences in any of the five variables.

# Path Analysis of Parenting Behavior by Gender

In order to test hypotheses 1 and 2, two sets of path analysis via regression analysis were conducted. Each analysis involved: (1) regressing the parenting behavior (positive and negative parenting) on the predictor variables of expressive suppression, cognitive reappraisal, and empathy; and (2) regressing the mediator variable of empathy on the exogenous variables of expressive suppression and cognitive reappraisal. The results of these path analyses are presented as follows.

The results showed that fathers' level of empathy was significantly associated with positive/negative parenting behavior (see Figure 1). Thus, the higher their reported level of empathy, the more they used positive parenting behavior (Beta = .386, t = 4.545, p < .001) and the less they used negative parenting behavior (Beta = -.184, t = -2.028, p < .05).

Both expressive suppression and cognitive reappraisal were not directly or indirectly related to positive/negative parenting. There was also no association between the two emotion regulation strategies and empathy. Thus, Hypotheses 1 and 2 were not supported for fathers.

The results showed that mothers' use of expressive suppression was directly and negatively associated with negative parenting behavior (see Figure 2). Thus, the more mothers used expressive suppression to regulate their emotions, the less they employed negative parenting behavior (Beta=-.193; t = -2.47, p < .05).

Mothers' employment of cognitive reappraisal was not found to have any direct influences on the criterion variables of positive/negative parenting behaviors. Rather, the influences were found to be indirect being mediated by empathy. Thus, the more mothers employed cognitive reappraisal to regulate their emotions, the stronger their reported feelings of empathy (Beta = .187, t = 2.17, p< .05); the stronger their reported feelings of empathy, (1) the higher their reported use of positive parenting behavior (Beta = .431, t = 5.45, p < .001), and (2) the lower their reported use of negative parenting behavior (Beta = -.4.09, t = - 5.23, p < .001). There was, however, no significant indirect relationship between expressive suppression and positive/negative parenting behaviors,



Figure 1: Path Model of Fathers' Parenting Behavior as a Function of the Direct and Indirect Influences of Expressive Suppression and Cognitive Reappraisal (Only Significant Paths Are Presented.)



Figure 2: Path Model of Mother's Parenting Behavior as a Function of the Direct and Indirect Influences of Expressive Suppression and Cognitive Reappraisal (Only Significant Paths Are Presented.)

being mediated by empathy. Thus, Hypotheses 1 and 2 were partially supported for mothers.

#### Discussion

### *Hypothesis 1: Relationship between Emotion Regulation and Parenting Behavior*

The results showed that Hypothesis 1 was partially supported for mothers but not supported for fathers. For mothers, expressive suppression was found to be directly and negatively associated with negative parenting behavior. Thus, the more mothers reported using expressive suppression to regulate emotions, the less they used negative parenting behavior, such as loosing temper, spanking the child, or saying mean things to the child. This finding is both unexpected and interesting, because although it is inconsistent with what previous research discovered among the Western samples (Enebrink et al., 2013; Gross & John, 2003; Tein, Sandler, and Zautra, 2000), it is consistent with findings among Asian samples (Butler, Lee, & Gross, 2007; Zohar, 2013). On the other hand, mothers' cognitive reappraisal was not directly related to parenting behavior. These findings suggest that there are cultural differences in emotion regulation and that while expressive suppression may be context dependent, cognitive reappraisal is not.

For fathers, emotion regulation strategies were not associated with fathers' parenting behavior in this sample. This finding was unexpected; it suggests that there are other more significant predictors of fathers' parenting behavior than emotion regulation. Fathers may use other emotion regulation strategies besides cognitive reappraisal and expressive suppression to regulate emotions in the context of parenting. Tulananda, Young, and Roopnarine (1994) found that Thai fathers, compared to mothers, seek support from extended family members and institutional sources (e.g., schools, childcares) when parenting their children. Social support may be a factor that is worth exploring in terms of how it relates to Thai fathers' parenting behavior. Another explanation is that fathers' involvement in childrearing tends to have less of an emotional character than that of mothers. When interactions are less emotionally charged, emotions may not be triggered and thus there is less opportunity for regulation. Tulananda, et al. (1994) found that Thai fathers spent 36% as much time as their wives did in caregiving, which implies that fathers and children have less opportunities to develop emotional bonding. The other explanation is that fathers may have less emotional insight than mothers. Previous studies suggested that men were less attentive or less aware of their emotions than women (for a review, see Nolen-Hoeksema, 2012). If this was the case for Thai fathers, it might explain the lack of association between emotion regulation and empathy as well as parenting behavior.

# Hypothesis 2: Empathy as a Mediator of Emotion Regulation and Parenting Behavior

The results showed that Hypothesis 2 was partially supported for mothers but not supported for fathers. As expected, empathy mediated the relationship between cognitive reappraisal and positive/negative parenting behavior for mothers. In fact, the significant mediating role of empathy for mothers but not for fathers implies that mothers may have more emotional insight than fathers. According to Roberts and Strayer (1996), emotional insight (e.g., lack of denial of emotions) leads to increased empathy; empathy then encourages prosocial behaviors, which may also include supportive and responsive parenting behavior.

For both mothers and fathers in the sample, empathy was a significant predictor of both positive and negative parenting behaviors; the higher their empathy level, the more they use positive parenting behavior and the less they use negative parenting behavior. This relationship is consistent with the direction of existing parenting research, which singles out parental empathy as an essential factor of positive parenting practices as well as a buffer against child maltreatment (Brems & Sohl, 1995; Gordon, 2003; Gottman, 1997; P érez-Alb éniz & De Pa úl, 2003).

### **Limitations & Future Research**

It is important to keep in mind that this present study used only self-reported questionnaires, which means that various uncontrollable biases demand (e.g., characteristics, socially desirable responding) may have influenced the data. For parenting behavior, the present study did not control for the possibility of socially desirable responding, which has been identified as a factor that may influence how participants responded to self-reported parenting questionnaires (Honaker, 2007). Future studies should control for the effect of socially desirable responding on self-reported parenting behavior, or introduce another assessment method, such as observer's rating or children's rating in order to address this issue. Moreover, there is a need to explore the nature of Thai fathers' involvement in parenting, specifically how they spend their time with children.

For empathy, this present study explored empathy as a unidimensional and primarily affective construct. It will be interesting to use a scale that taps into the multidimensionality of empathy, such as the Interpersonal Reactivity Index (IRI; Davis, 1980/1983) and see how each dimension relates to emotion regulation and parenting behavior. Moreover, future research should identify the predictors of parental empathy whether or not in relation to emotion regulation. This will serve to enhance existing knowledge, promote positive parenting, and prevent deleterious acts toward children.

Emotion regulation and empathy are merely two factors that have been identified as potentially influencing the quality of parenting. Future parenting studies should address a wider range of emotion regulation strategies with a view to identifying those that are relevant to Thai parenting culture. Moreover, research needs to explore long-term consequences of expressive suppression on the caregiving quality, parent-child relationship, and development of children's emotion regulation capacity. This area of research is important because parenting is a long-term process and has a life-long impact on a child's development into adulthood.

# Conclusion

Emotion regulation relates to parenting behavior differently for mothers and fathers; while cognitive reappraisal and expressive suppression predict mothers' parenting behavior, both directly and through empathy, they do not predict fathers' parenting behavior. Despite these differences, expressive suppression and cognitive reappraisal are effective emotion regulation strategies in the context of Thai parenting. Thai mothers' use of expressive suppression is associated with lower negative parenting behaviors, while cognitive reappraisal allows them to provide empathic and positive caregiving for their children.

Apart from emotion regulation, empathy is a crucial factor in promoting positive parenting practices, while deterring negative parenting practices. Our results further support the established finding that parental empathy is one of the key factors that help prevent child abuse and maltreatment, and therefore should be promoted and made aware to parents as well as those who have the power to influence children's lives and well-being, including older siblings, extended family members, teachers, babysitters, and healthcare professionals.

### References

- Amstadter, A. (2008). Emotion regulation and anxiety disorders. Anxiety Disorders, 22, 211-221. Doi:10.1016/j.janxdis.2007.02.004
- Baron-Cohen, S., & Wheelwright, S. (2004). The empathy quotient: An investigation of adults with Asperger syndrome or high functioning autism, and normal sex differences. *Journal of autism and developmental disorders*, 34(2), 163-175. Doi:10.1023/B:JADD.0000022607.19833.00
- Batson, C. D., Fultz, J., & Schoenrade, P. A. (1987). Distress and empathy: Two qualitatively distinct vicarious emotions with different motivational consequences. *Journal of Personality*, 55(1), 19-39. Doi:10.1111/j.1467-6494.1987.tb00426.x
- Borkovec, T. D., Alcaine, O. M., & Behar, E. (2004). Avoidance theory of worry and generalized anxiety disorder. In R. G. Heimberg, C. L. Turk, & D. S. Mennin (Eds.). *Generalized anxiety disorder:* Advances in research and practice (pp. 77-108). New York: The Guildford Press.
- Braungart-Rieker, J. M., Garwood, M. M., Powers, B. P., & Wang, X. (2001). Parental sensitivity, infant affect, and affect regulation: Predictors of later attachment. *Child Development*, 72(1), 252-270. Doi: 10.1111/1467-8624.00277

- Brems, C., & Sohl, M. A. (1995). The role of empathy in parenting strategy choices. *Family Relations*, 44, 189-194.
- Butler, E. A., Lee, T. L., & Gross, J. J. (2007). Emotion regulation and culture: Are the social consequences of emotion suppression cultural-specific? *Emotion*, 7(1), 30-48. Doi: 10.1037/1528-3542.7.1.30
- Butler, E. A., Egloff, B., Wilhelm, F. H., Smith, N. C., Erickson, E. A., & J. J. (2003). The social consequences of expressive suppression. *Emotion*, 3(1), 48-67. Doi: 10.1037/1528-3542.3.1.48
- Centre for Parenting and Research. (2006, August). *Parental empathy and child maltreatment*. Retrieved from NSW Department of Community Services website: http://www.community.nsw.gov. au/docswr/\_assets/main/documents/researchnotes\_ parental\_empathy.pdf
- Chang, L., Schwartz, D., Dodge, K. A., McBride-Chang, C. (2003). Harsh parenting in relation to child emotion regulation and aggression. *Journal of Family Psychology*, 17(4), 598-606. Doi: 10.1037 /0893-3200.17.4.598
- Davis, M. H. (1980). A multidimensional approach to individual differences in empathy. JSAS Catalog of Selected Documents in Psychology, 10, 85. Retrieved from http://www.uv.es/~friasnav/Davis \_1980.pdf
- Davis, M. H. (1983). The effects of dispositional empathy on emotional reactions and helping: A multidimensional approach. *Journal of Personality*, *51*, 167-184. Doi: 10.1111/j.1467-6494.1983.tb00 860.x
- Decety, J., & Jackson, P. L. (2004). The functional architecture of human empathy. *Behavioral and Cognitive Neuroscience Reviews*, *3*(2), 71-100. Doi: 10.1177/1534582304267187
- Decety, J., & Ickes, W. (Eds.). (2009). *The social neuroscience of empathy*. Cambridge, MA: The MIT Press.
- Decety, J., Jackson, P. L., & Brunet, E. (2007). The cognitive neuropsychology of empathy. In T. F. D. Farrow and P. W. R. Woodruff (Eds.), *Empathy in mental illness* (pp. 3-16). Singapore: Cambridge University Press.
- De Paúl, J., P érez-Alb éniz, A., Guibert, M., Asla, N., & Ormaechea, A. (2008). Dispositional empathy in neglectful mothers and mothers at high risk for child physical abuse. *Journal of interpersonal violence*, 23(5), 670-684. Doi: 10.1177/0886260507313532
- Dix, T. (1991). The affective organization of parenting: Adaptive and maladaptive processes. *Psychological Bulletin, 110* (1), 3-25. Doi: 10.1037/0033-2909. 110.1.3
- Dopke, C. A., Lundahl, B. W., Dunsterville, E., & Lovejoy, M. C. (2003). Interpretations of child compliance in individuals at high- and low-risk for child physical abuse. *Child Abuse & Neglect*, 27, 285-302. Doi: 10.1016/S0145-2134(03)00007-3

- Easterbrooks, M. A., & Goldberg, W. A. (1984). Toddler development in the family: Impact of father involvement and parenting characteristics. *Child Development*, 55(3), 740-752.
- Eisenberg, N. (2010). Empathy-related responding: Links with self-regulation, moral judgment, and moral behavior. In M. Mikulincer, & P. R. Shaver (Eds.), *Prosocial motives, emotions, and behavior: The better angels of our nature* (pp. 129-148). Washington, D C: American Psychological Association.
- Eisenberg, N., & Eggum, N. D. (2009). Empathic responding: Empathy and personal distress. In J. Decety, & W. Ickes (Eds.), *The social neuroscience* of empathy (pp. 71-84). Cambridge, MA: The MIT Press.
- Eisenberg, N., Fabes, R. A., Murphy, B., Karbon, M., Maszk, P., Smith, M., O'Boyle, C., & Suh, K. (1994). The relations of emotionality and regulation to dispositional and situational empathy-related responding. *Journal of Personality and Social Psychology*, 66 (4), 776-797. Doi:10.1037/0022-3514.66.4.776
- Enebrink, P., Björnsdotter, A., & Ghaderi, A. (2013). The Emotion Regulation Questionnaire: Psychometric properties and norms for Swedish parents of children aged 10-13 years. *Europe's Journal of Psychology*, 9(2), 289-303. Doi:10.5964/ejop.v 9i2.535
- Feldner, M. T., Zvolensky, M. J., Eifert, G. H., & Spira, A. P. (2003). Emotion avoidance: An experimental test of individual differences and resonse suppression using biological challenge. *Behaviour Research and Therapy*, 41, 403-411. Doi: 10.10 16/S0005-7967(02)00020-7
- Field, T., Healy, B., Goldstein, S., & Guthertz, M. (1990). Behavior-state matching and synchrony in motherinfant interactions of nondepressed versus depressed dyads. *Developmental Psychology*, 26(1), 7-14. Doi:10.1037/0012-1649.26.1.7
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, 9, 679-700. Retrieved from http://discovery.ucl.ac.uk/168571/ 1/download8.pdf
- Fonagy, P., Gergely, G., Jurist, E., & Target, M. (2002). Affect regulation, mentalization, and the development of the self. New York: Other Press.
- Fonagy, P., Steele, M., Steele, H., Moran, G. S., & Higgitt, A. C. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, *12*(3), 201-218. Doi: 10.1002/1097-0355(199123)12:3<201:AID-IMHJ 2280120307>3.0.CO;2-7
- Gondoli, D. M. & Silverberg, S. B. (1997). Maternal emotional distress and diminished responsiveness: The mediating role of parenting efficacy and parental perspective taking. *Developmental*

*Psychology*, *33* (5), 861-868. Doi:10.1037/0012-1649.33.5.861

- Gordon, M. (2003, November 26). *Roots of Empathy: responsive parenting, caring societies*. Paper presented at the 1296th Meeting of the Keio Medical Society, Tokyo, Japan. Retrieved from https:// www.jstage.jst.go.jp/article/kjm1952/52/4/52\_4\_23 6/\_pdf
- Gottman, J. M. (1997). *Raising an emotionally intelligent child*. New York: Simon & Schuster.
- Gross, J. J. (1998). Antecedent- and response-focused emotion regulation: Divergent consequences for experience, expression, and physiology. *Journal of Personality and Social Psychology*, 74(1), 224-237. Doi:10.1037/0022-3514.74.1.224
- Gross, J. J. (2002). Emotion regulation: Affective, cognitive, and social consequences. *Psychophysiology*, 39, 281-291. Doi: 10.1017/S00 48577201393198
- Gross, J. J., & Levenson, R. W. (1997). Hiding feelings: The acute effects of inhibiting negative and positive emotion. *Journal of Abnormal Psychology*, 106(1), 95-103. Doi:10.1037/0021-843X.106.1.95
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362. Doi:10.1037/0022-3514.85.2.348
- Gross, J. J., & Thompson, R. A. (2007). Emotion regulation: Conceptual foundations. In J.J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-24). New York: The Guilford Press.
- Haga, S. M., Kraft, P., & Corby, E. (2009). Emotion regulation: Antecedents and well-being outcomes of cognitive reappraisal and expressive suppression in cross-cultural samples. *Journal of Happiness Studies*, 10, 271-291.
- Hodges, S., & Wegner, D. M. (1997). Automatic and controlled empathy. In W. J. Ickes (Ed.), *Empathic* accuracy (pp. 311-339). New York: The Guilford Press.
- Hogan, R. (1969). Development of an empathy scale. Journal of Consulting and Clinical Psychology, 33, 307-316. Doi: 10.1037/h0027580
- Honaker, S. M. (2007). The effects of item formation socially desirable responding in parental self-report (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3280320)
- John, O. P., & Gross, J. J. (2004). Healthy and unhealthy emotion regulation: Personality processes, individual differences, and life span development. *Journal of Personality*, 72(6), 1301-1334. Doi: 10.1111/j.1467-6494.2004.00298.x
- Kerig, P. K., Cowan, P. A., & Cowan, C. P. (1993). Marital quality and gender differences in parentchild interaction. *Developmental Psychology*, 29(6), 931-939. Doi:10.1037/0012-1649.29.6.931

- Leahy, R. L., Tirch, D., & Napolitano, L. A. (2011). Emotion regulation in psychotherapy: A practitioner's guide. New York: The Guilford Press.
- Lelorain, S., Sultan, S., Zenasni, F., Catu-Pinault, A., Jaury, P., Boujut, E., & Rigal, L. (2012). Empathic concern and professional characteristics associated with clinical empathy in French general practitioners. *European Journal of General Practice*, 19 (1), 3-28.
- Letourneau, C. (1981). Empathy and stress: How they affect parental aggression. *Social Work*, *26*(5), 383-389. Doi:10.1093/sw/26.5.383
- Lindhout, I., Markus, M., Hoogendijk, T., Borst, S., Maingay, R., Spinhoven, P., van Dyck, R., & Boer, F. (2006). Childrearing style of anxiety-disordered parents. *Child Psychiatry and Human Development*, 37, 89-102. Doi: 10.1007/s10578-006-0022-9
- Lovejoy, M. C., Weis, R., O'Hare, E., & Rubin, E. C. (1999). Development and initial validation of the parent behavior inventory. *Psychological Assessment*, 11 (4), 534-545. Doi:10.1037/1040-3590.\11.4.534
- Matsumoto, D. (2006). Are cultural differences in emotion regulation mediated by personality traits? *Journal of Cross-cultural Psychology*, *37*(4), 421-437. Doi: 10.1177/0022022106288478
- Matsumoto, D., Yoo, S. H., Nakagawa, S., & 37 Members of the Multinational Study of Cultural Display Rules. (2008). Culture, emotion regulation, and adjustment. *Journal of Personality and Social Psychology*, 94(6), 925-937. Doi:10.1037/0022-3514.94.6.925
- McDonald, N., & Messinger, D. (2011). The development of empathy: How, when, and why. In A. Acerbi, J. A. Lombo, & J. J. Sanguineti (Eds.), *Free will, Emotions, and Moral Actions: Philosophy* and Neuroscience in Dialogue. London: IF-Press. Retrieved from http://www.psy.miami.edu/faculty/ dmessinger/c\_c/rsrcs/rdgs/emot/McDonald-Messinger\_Empathy%20Development.pdf
- Mehrabian, A., & Epstein, N. (1972). A measure of emotional empathy. *Journal of personality*, 40(4), 525-543. Doi:10.1111/j.1467-6494.1972.tb00078.x
- Mills-Koonce, W. R., Geriepy, J., Propper, C., Sutton, K., Calkins, S., Moore, G., & Cox, M. (2007). Infant and parent factors associated with early maternal sensitivity: A caregiver-attachment systems approach. *Infant Behavior & Development, 30*, 114-126. Doi: 10.1016/j.infbeh.2006.11.010
- Moore, S. A., Zoellner, L. A., & Mollenholt, N. (2008). Are expressive suppression and cognitive reappraisal associated with stress-related symptoms? *Behavior Research and Therapy*, 46(9), 993-1000. Doi:10.1016/j.brat.2008.05.001
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 16 (2), 361-388. Doi: 10.1111 /j.1467-9507.2007.00389.x

- Muller-Nix, C., Forcada-Guex, M., Pierrehumbert, B., Jaunin, L., Borghini, A., & Ansermet, F. (2004). Prematurity, maternal stress and mother-child interactions. *Early Human Development*, 79, 145-158. Doi: 10.1016/j.earlhumdev.2004.05.002
- Nolen-Hoeksema, S. (2012). Emotion regulation and psychopathology: The role of gender. *Annual Review of Clinical Psychology*, 8, 161-87.
- Office of Women's Affairs and Family Development. (2010). รายงานข้อมูลสถานการณ์ด้านความรุนแรงของประเทศไทย และ ตามมาตรา 17 แห่งพระราชบัญญัติอุ้มครองผู้ถูกกระทำด้วยความรุนแรงใน ครอบครัว พ.ศ. 2550 [Report on Violence in Thailand and Section 17 of the Domestic Violence Victim Protection Act of 2007]. Retrieved from Thailand's Ministry of Social Development and Human Security website: http://www.violence.in.th/pub licweb/pdf\รายงานมาตรา17.pdf
- Pérez-Albéniz, A., & De Paúl, J. (2003). Dispositional empathy in high- and low-risk parents for child physical abuse. *Child Abuse & Neglect*, 27(7), 769-780. Doi: 10.1016/S0145-2134(03)00111-X
- Phares, V. (1992). Where's poppa? The relative lack of attention to the role of fathers in child and adolescent psychopathology. *American Psychologist*, 47(5), 656-664. Doi:10.1037/0003-066X.47.5.656
- Pineda, A. Q. (2008). Children's attributional style as a mediator of the relation between parenting behaviors and children's depressive symptoms (Doctoral dissertation). Retrieved from http://etd.library.vanderbilt.edu/available/etd-05302007-141314/unrestricted/dissertation.pdf
- Piyasilp, V. (2008). คู่มือการเลี้ยงลูก ดอนวัยรุ่น [Handbook for Parenting: Adolescents]. Bangkok: Queen Sirikit National Institute of Child Health.
- Preston, S. D., & de Waal, F. B. M. (2002). Empathy: Its ultimate and proximate bases. *Behavioral and Brain Sciences*, 25, 1-72. Doi: 10.1017/S0140525X0200 0018
- Roberts, W., & Strayer, J. (1996). Empathy, emotional expressiveness, and prosocial behavior. *Child Development*, 67, 449-470. Doi: 10.1111/j.1467-8624.1996.tb01745.x
- Rueger, S. Y., Katz, R. L., Risser, H. J., & Lovejoy, M. C. (2011). Relations between parental affect and parenting behaviors: A meta-analytic review. *Parenting: Science and Practice*, 11, 1-33. Doi:10.1080/15295192.2011.539503
- Schore, A. N. (2000). Attachment and the regulation of the right brain. Attachment & Human Development, 2(1), 23-47. Retrieved from http://www.allanschore. com/pdf/SchoreAttachHumDev.pdf
- Schore, A. N. (2001a). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22(1-2), 7-22. Retrieved from http://www.allanschore.com/pdf/SchoreIMHJAttac hment.pdf

- Schore, A. N. (2001b). The effects of early relational trauma on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22 (1-2), 201-269. Retrieved from http://www.allanschore.com/pdf/SchoreIMHJTrau ma01.pdf
- Siegel, D. J. (1999). *The developing mind: How relationships and the brain interact to shape who we are.* New York: The Guilford Press.
- Siegel, D. J. (2010). *The mindful therapist*. New York: Mind Your Brain.
- Skopp, N. A., McDonald, R., Jouriles, E. N., & Rosenfield, D. (2007). Partner aggression and children's externalizing problems: Maternal and partner warmth as protective factors. *Journal of Family Psychology*, 21(3), 459-467. Doi: 10.1037/ 0893-3200.21.3.459
- Spreng, R. N. McKinnon, M. C., Mar, R. A., & Levine, B. (2009). The Toronto Empathy Questionnaire: Scale development and initial validation of a factoranalytic solution to multiple empathy measures. *Journal of Personality Assessment*, 91(1), 62-71. Doi: 10.1080/00223890802484381.
- Sroufe, L. A., Egeland, B., Carlson, E. A., Collins, W. A. (2005). The development of the person: The Minnesota study of risk and adaptation from birth to adulthood. New York: The Guilford Press.
- Tein, J., Sandler, I. N., & Zautra, A. J. Stressful life events, psychological distress, coping, and parenting of divorced mothers: A longitudinal study. *Journal of Family Psychology*, 14(1), 27-41. Doi: 10.1037/ 0893-3200.14.1.27

- Tulananda, O., Young, D. M., Roopnarine, J. L. (1994). Thai and American fathers' involvement with preschool-age children. *Early Development and Care*, 97(1), 123-133. Doi: 10.1080/03004439 40970109
- Tulananda, O., & Roopnarine, J. L. (2001). Mothers' and fathers' interactions with preschoolers in the home in northern Thailand: Relationships to teachers' assessments of children's social skills. *Journal of Family Psychology*, 15(4), 676-687.
- Weis, R., & Lovejoy, M. C. (2002). Information processing in everyday life: Emotion-congruent bias in mothers' reports of parent-child interactions. *Journal of Personality and Social Psychology*, 83(1), 216-230. Doi:10.1037/0022-3514.83.1.216
- Whaley, S. E., Pinto, A., & Sigman, M. (1999). Characterizing interactions between anxious mothers and their children. *Journal of Consulting* and Clinical Psychology, 67(6), 826-836. Doi:10.1037/0022-006X.67.6.826
- Zeifman, D.M. (2003). Predicting adult responses to infant distress: Adult characteristics associated with perceptions, emotional reactions, and timing of intervention. *Infant Mental Health Journal*, 24(6), 597-612. Doi:10.1002/imhj.10077
- Zohar, S. (2013). Influence of cultural values on emotion regulation and well-being: A study of Thai university students. *AU Journal*, 5(1), 83-91.
  Retrieved from http://www.journal.au.edu/scholar/ 2013/vol5no1/Scholarv5n1\_article11.pdf